Welcome

Thank you for purchasing a Sony VAIO® computer! Your new computer is a superb blend of high technology and easy-to-use functionality. The information provided here is designed to help you to become familiar with the hardware and software programs included with your system.

- View the Electronic Flyer, which provides updates and supplemental information about your computer.
- Go to the Sony Online Support Web site, to view the VAIO® Computer Specifications which lists your computer's hardware specifications and preinstalled software information.
- For Sony software information, click **Start** and **Welcome to VAIO Life**.

Getting Started

Congratulations on your purchase of a Sony VAIO® computer! Your new, high-performance, multimedia computer combines state-of-the-art computer functionality with the latest audio, video and information technology features.

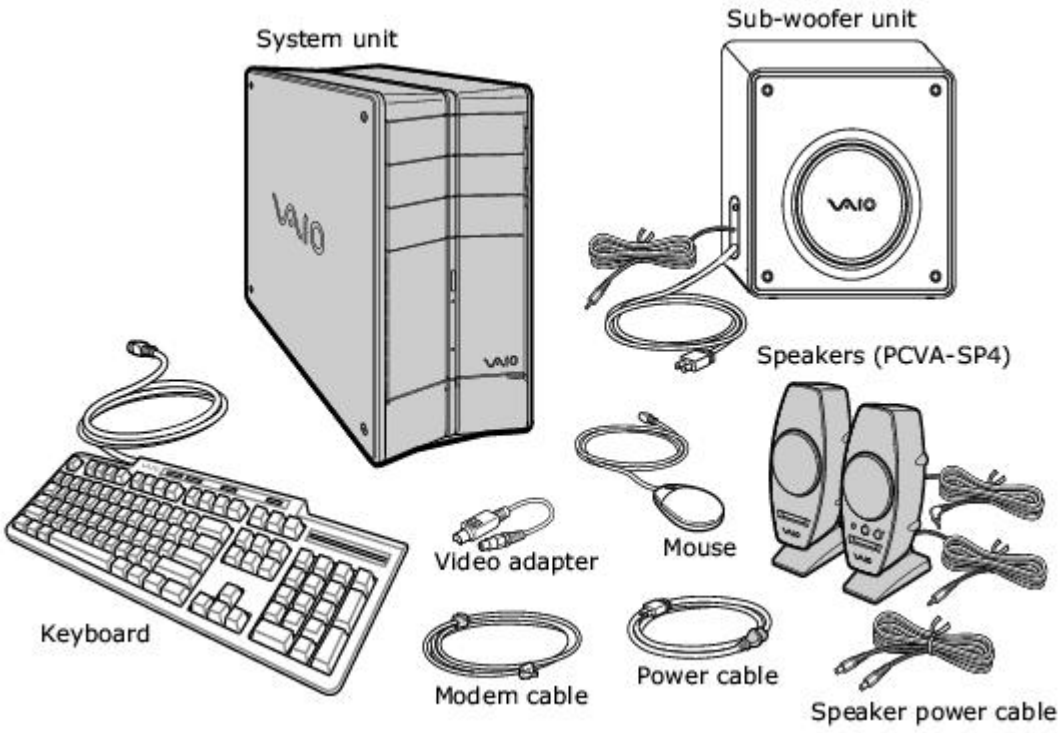
- Unpacking your Computer
- Planning an Ergonomic Work Space

Unpacking your Computer

Your computer may not be supplied with all of the accessories shown, depending on the system configuration you purchased. For details on the accessories supplied with your computer, see the online *Specifications* sheet.

Your VAIO® computer is not supplied with System or Application Recovery CDs. Use the VAIO Recovery Wizard utility to recover your computer's operating system and preinstalled software.

Computer and supplied accessories



Manuals

- ***VAIO® Computer Quick Start*** — Provides basic information on setting up and registering your computer. The Quick Start also provides resources for technical support, safety guidelines and owner's information.

Online Documentation

- ***VAIO® Computer User Guide*** — Contains features and specifications of your computer. It also includes information on the applications included with your system, how to contact software vendors, and solve common problems.

  To access the online User Guide:

  1. Click **Start** in the Windows taskbar, then click **Help and Support**.
  2. From the **VAIO Help and Support Center** menu, click **VAIO User Guide**.

- ***Specifications*** — This online specification sheet describes the hardware and software configuration of your VAIO computer. To access this online information, go to the online *Specifications* sheet.

- ***VAIO Software*** — Provides specific information on the preinstalled software on your computer.

  To access this online software information:

  1. Click **Start** in the Windows® taskbar.
  2. Click **Welcome to VAIO Life**.

Hard Disk Drive Recovery

Your computer is equipped with a utility program that recovers your computer's operating system and preinstalled software. For more information about hard disk drive recovery:

1. Click **Start** in the Windows® taskbar, then click **Help and Support**.

2. From the **VAIO Help And Support Center**, click **VAIO Recovery Options**.

Other

A Software Library, containing the Microsoft® software and Sony end-user license agreements.

Planning an Ergonomic Work Space

Before you set up your new computer, find the best location for your new computer and plan your work space. There are several ergonomic factors to consider when you arrange your work space:

- **Stable work surface —** Use a stable work surface large enough to support the computer and other peripheral equipment.

- **Ventilation —** Leave at least eight inches of space on the left and back sides of your computer to enable proper ventilation.

- **Placement of the keyboard, mouse, and other input devices —** Place your keyboard, mouse, and other input devices so that your arms and hands are in a relaxed, comfortable position. The keyboard should be directly in front of you. Adjust the level of the keyboard so that your lower arms are parallel to the floor. Keep your wrists in a relaxed position when you are using the keyboard — not angled up or down. Use the palmrest only briefly, for resting. While typing, never use the palmrest or rest your hands on the table. Position the mouse at the same level as the keyboard. Hold the mouse with a relaxed hand, and use your whole arm to move it. Take breaks during sessions with your computer. Excessive use of the mouse or a joystick may strain muscles or tendons.

- **Furniture and posture —** Sit in a chair with good back support and armrests. Adjust the level of the chair so your feet are flat on the floor. A footrest may make you more comfortable. Sit with relaxed, upright posture — avoid slouching forward or leaning far backward.

- **Viewing angle of the display —** Position the display 18 to 26 inches directly in front of you, with the top of the screen at or a little below eye level. Use the display's tilting feature to find the best position. You can reduce eye strain and muscle fatigue by placing the display in the proper position.

- **Lighting —** Choose a location where windows and lights do not create glare and reflection on the display. Use indirect lighting to avoid bright spots on the display. You can also purchase accessories for your display that help reduce glare. Proper lighting adds to your comfort and work effectiveness.

Locating Controls And Ports

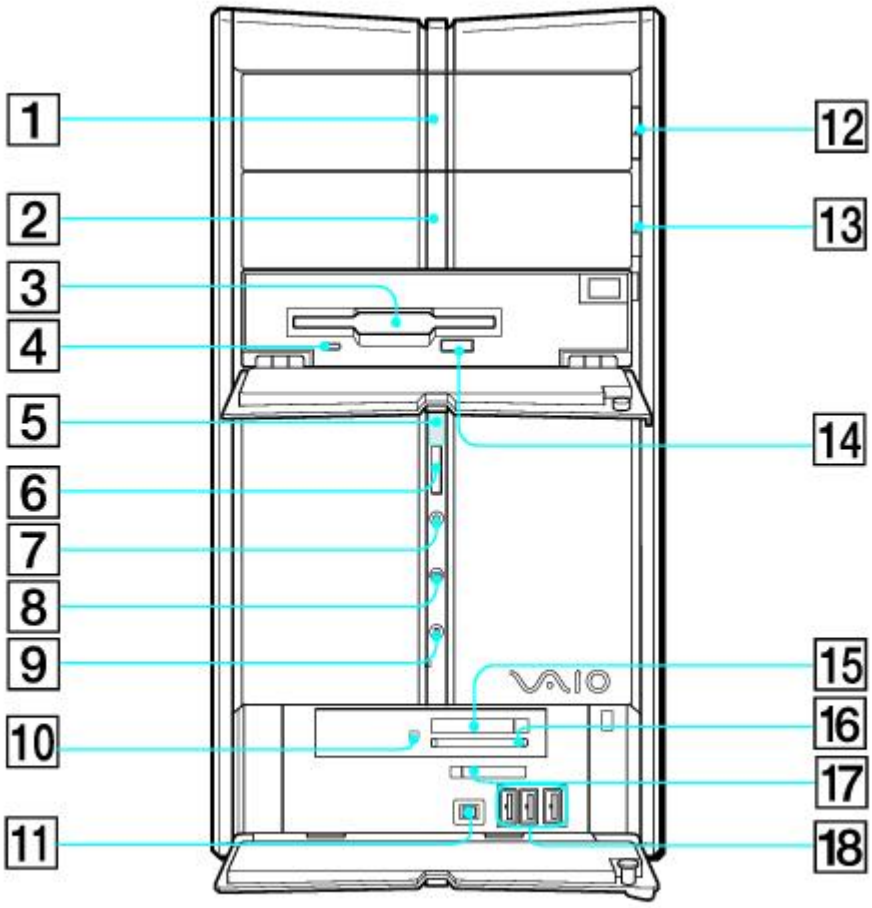
This section is intended to familiarize you with the controls, ports and jacks on your computer. Your computer may not be equipped with all of these hardware features, and the location of the controls, ports, and jacks may vary from the illustrations shown in this section. To view the specific connection capabilities for your system, see the online *Specifications* sheet.

- About the Front Panel
- About the Back Panel
- About the Sub-Woofer
- About the Keyboard

About the Front Panel

The front panel of your VAIO® Computer enables access to drives, media slots, ports and jacks that enable you to connect compatible peripheral devices. System configuration may vary, depending on the model purchased. See the online specifications sheet for details.

Front panel



1 Optical drive 1

See the online *Specifications* sheet for optical drive information.

2 Optical drive 2

See the online *Specifications* sheet for optical drive information.

3 Floppy disk drive

Reads and writes data from and to a 3.5-inch floppy disk.

4 Floppy disk drive access indicator

Light is green while reading and writing data from and to a floppy disk.

5 Power indicator

Light is blue while the power is on.

6 Power switch

Turns the computer on and off.

7 Stand by indicator

Light is red when the computer is placed in Stand by mode.

8 Optical drive access indicator

Light is amber while reading and writing data from and to the optical drives.

9 Hard disk drive access indicator

Light is amber while reading and writing data from and to the hard disk.

10 Media access indicator[1]

Light is amber when reading or writing data.

11 i.LINK (4-pin) S400 port (IEEE 1394)

Connection for a compatible digital device.

12 Optical drive 1 eject button

Ejects a disc from Optical drive 1.

13 Optical drive 2 eject button

Ejects a disc from Optical drive 1.

14 Floppy disk eject button

Ejects a floppy disk from the floppy disk drive.

15 CompactFlash®/Microdrive media slot

Reads and writes data from and to CompactFlash or MicroDrive media.

16 SmartMedia media slot

Reads and writes data from and to SmartMedia cards.

17 Memory Stick media slot and access indicator

Reads and writes data from and to a Memory Stick® media. The access indicator is amber when reading or writing data to a Memory Stick media.

18 Universal Serial Bus (USB 2.0) ports (3)

Connections for compatible high/full/low-speed USB devices.

[1] On models equipped with this hardware configuration, the media access indicator light is amber when reading or writing data to the SmartMedia , or CompactFlash®/Microdrive slots

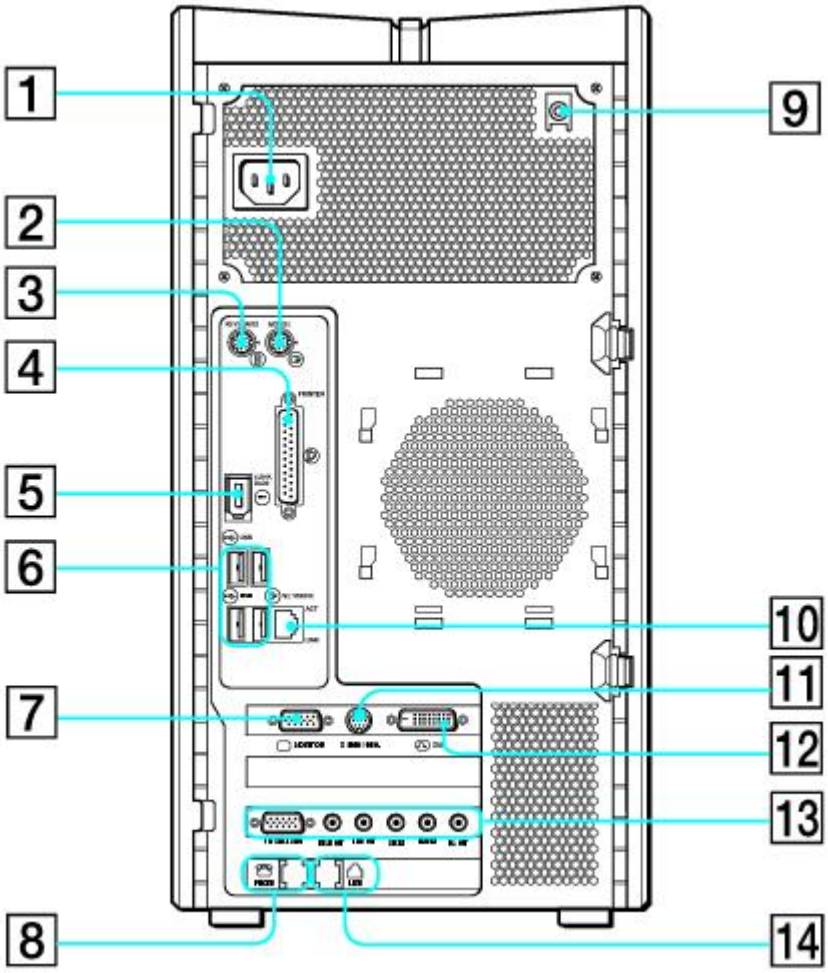
i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other.

Please refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK devices to your system, such as an optical or hard disk drive, confirm their operating system compatibility and required operating conditions.

About the Back Panel

The back panel of your computer contains the ports for supplied and optional accessories. The icons on the back panel locate and identify the ports on your computer.

Back panel



1 AC Input port

Connection for the supplied power cord.

2 Mouse port

Connection for a PS/2® mouse.

3 Keyboard port

Connection for a PS/2 keyboard.

4 Printer port

Connection for a parallel device, such as a printer or scanner.

5 i.LINK 6-pin S400 port (IEEE 1394)

Connection and power for a compatible digital device, such as a Sony Digital Handycam® camcorder.

6 Universal Serial Bus (USB 2.0) ports (4)

Connections for compatible high/full/low-speed USB devices.

7 Monitor port

Connection for a standard display.

8 Telephone jack

Connection for a telephone cable (optional) to the computer.

9 Speaker DC Out jack

Connection for the supplied speaker power cable.

10 Ethernet port

Connection for a 10BASE-T/100BASE-TX/1000BASE-TX Ethernet.

(The port marked with (Network) is for LAN connections only.)

11 TV Out (S-video/video) jack[1]

Connection for an S-video cable (optional).

12 Monitor (DVI) port

Connection for a DVI monitor.

13 Joystick/MIDI port[1]

Connection for a joystick or MIDI device.

Rear Out jack[1]

Connection for optional speakers, or external amplifier.

Line Out jack[1][2]

Connection for the supplied sub-woofer, speakers or optional headphones.

Microphone In jack[1]

Connection for a microphone (optional).

Line In jack[1]

Connection for an audio device.

Digital/Analog Out jack[1]

Connection for external digital devices or digital speaker systems.

14 Modem line jack

Connection for the modem (supplied) cable to the wall jack.

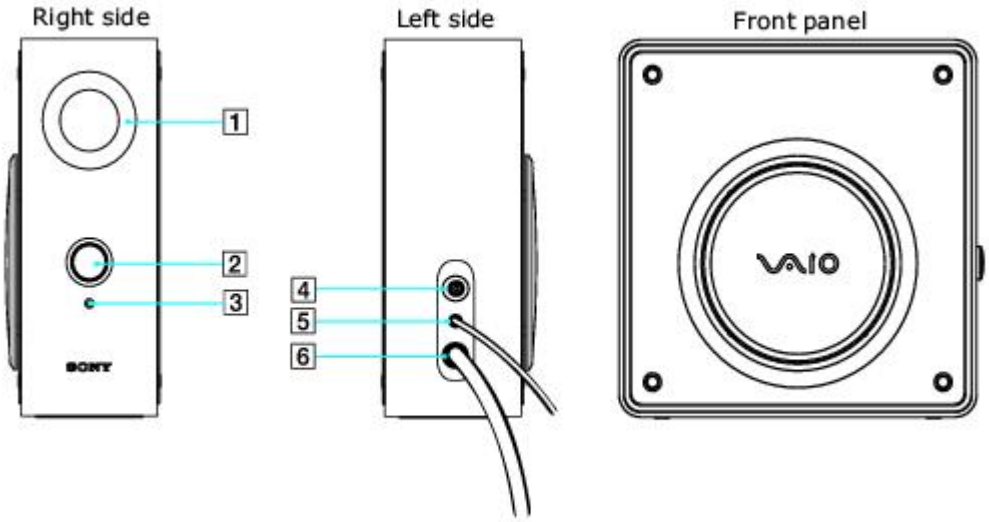
[1] This feature is available on selected models. See the specifications sheet for information on your computer's hardware configuration

[2] Certain VAIO computer models are supplied with a sub-woofer unit. See the specifications sheet for information on your computer's hardware configuration

About the Sub-Woofer

Certain VAIO® computers are supplied with a sub-woofer unit to enhance your system's sound capability.

Sub-woofer unit



1 Port

The port extends the low frequency response to extend the volume output of the sub-woofer unit.

2 Power knob/volume control

Rotate the knob clockwise to turn on the sub-woofer unit. Control the volume by rotating the knob until the desired volume is reached. Rotate the knob counter-clockwise to turn off the sub-woofer unit.

3 Power indicator

Light is green while the power is on.

4 Speaker jack

Connection for the speaker cable (RCA plug).

5 Sub-woofer unit cable

Connects the sub-woofer unit to the computer's Line Out jack.

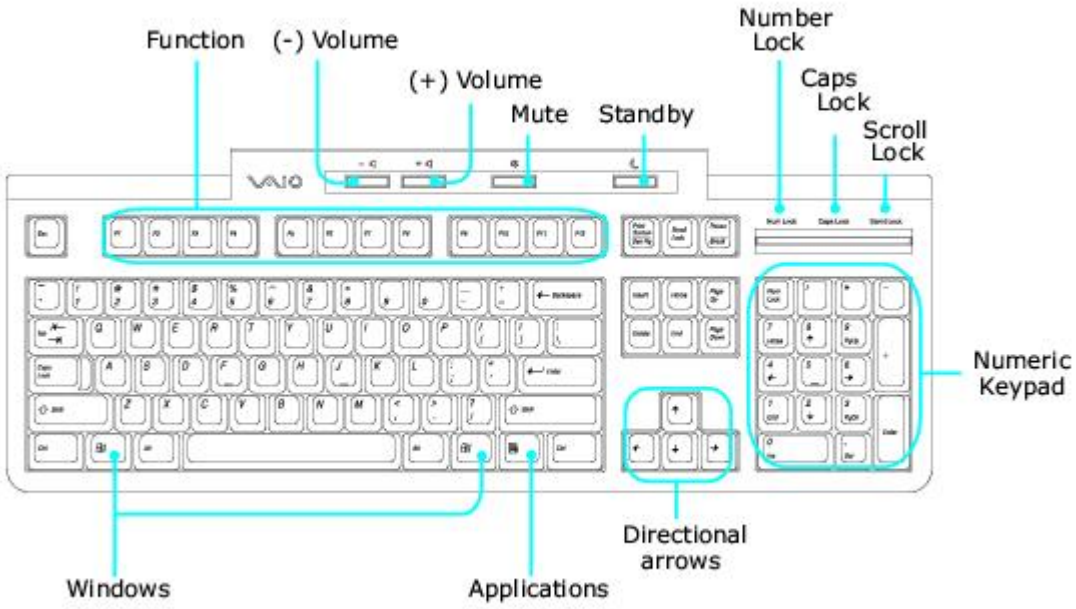
6 AC power cord

Connects the sub-woofer unit to a grounded AC wall outlet or power strip.

About the Keyboard

Your VAIO® keyboard uses a standard key arrangement with additional keys that perform specific functions.

VAIO Keyboard



KEY **DESCRIPTION**

Function The 12 function keys along the top of the keyboard are used to perform certain tasks. The task associated with each function key may vary from one application to the next.

Volume Control Press a button to increase (+) or decrease (-) the volume of the speakers.

Mute Press the button to turn off the volume of the speaker. Press the Mute button again to restore sound.

Standby Press the button to place the computer in Standby mode. Press the Power button or any key briefly, to resume normal operation.

Numeric keypad Use the numeric keypad area to type numbers or to perform basic math calculations. Press the Num Lock key to activate the numeric keypad. (The Num Lock indicator lights.) Press the Num Lock key again to deactivate the numeric keypad.

Directional Arrows The Up, Down, Left, and Right arrow keys move the pointer on the screen.

Applications

The Applications key displays a shortcut menu in certain software applications. Pressing this key is equivalent to clicking the right mouse button.

Windows

The key with the Microsoft® Windows® logo, displays the Start menu. Pressing this key is equivalent to clicking Start on the taskbar.

INDICATORS FUNCTION

Num Lock The Num Lock indicator lights when the numeric keypad is activated. When the indicator is off, the directional

arrow and correction keys on the numeric keypad area are active.

Caps Lock The Caps Lock indicator lights up to advise you that the keyboard is set to type letters in uppercase. When the indicator is off, the letters appear in lower case as you type.

Scroll Lock The Scroll Lock indicator lights up to advise you that your screen's scrolling pattern has changed. When the indicator is off, the screen scrolls normally. This function is not available with all software applications.

Setting Up Your Computer

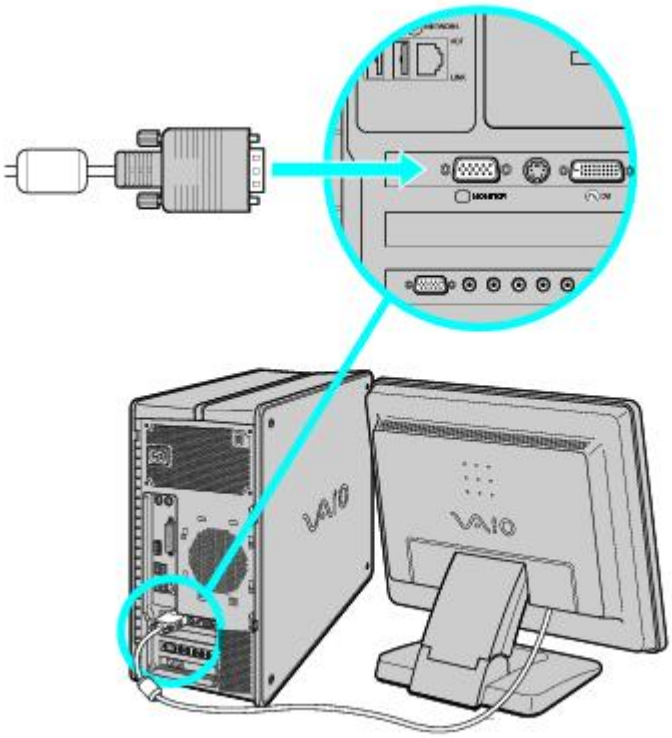
Your computer may not be equipped with all of the hardware features described in the section. The location of the controls, ports, and jacks may vary from the illustrations shown. See the online *Specifications* sheet for your system's specific hardware configuration.

- Connecting a Display (Monitor)
- Connecting the Speakers and Sub-woofer Unit
- Connecting the Keyboard and Mouse
- Connecting the Telephone and Modem cables
- Connecting the Power Cords
- Turning On your Computer
- Registering your Computer

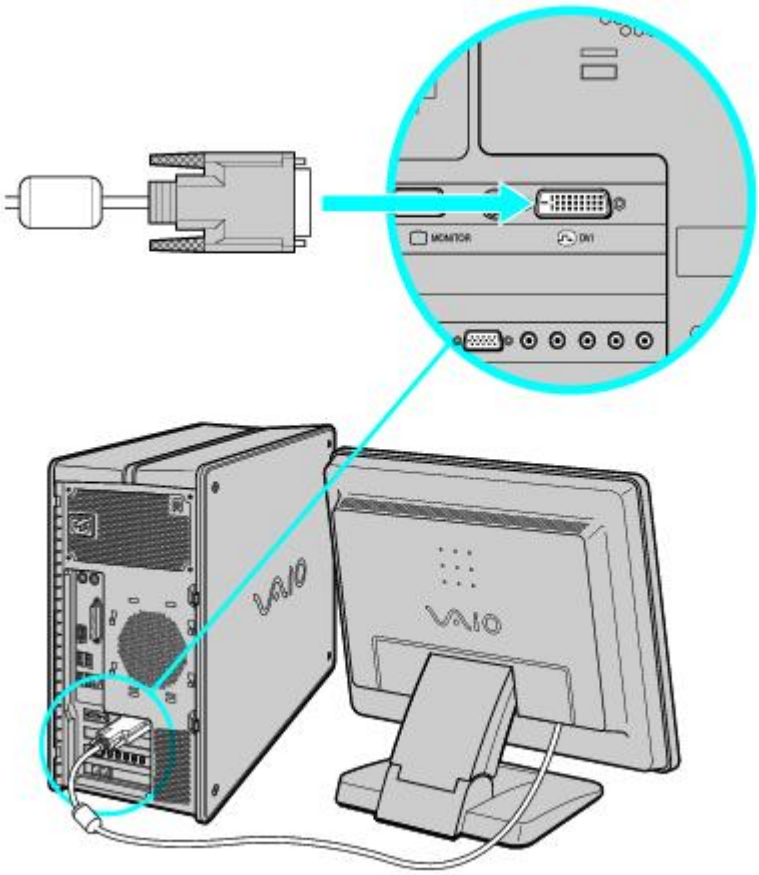
Connecting a Display (Monitor)

1. Plug the display's cable into the monitor port.
2. If necessary, plug the display's cable into the rear of the display.

To connect a display



To connect a DVI display

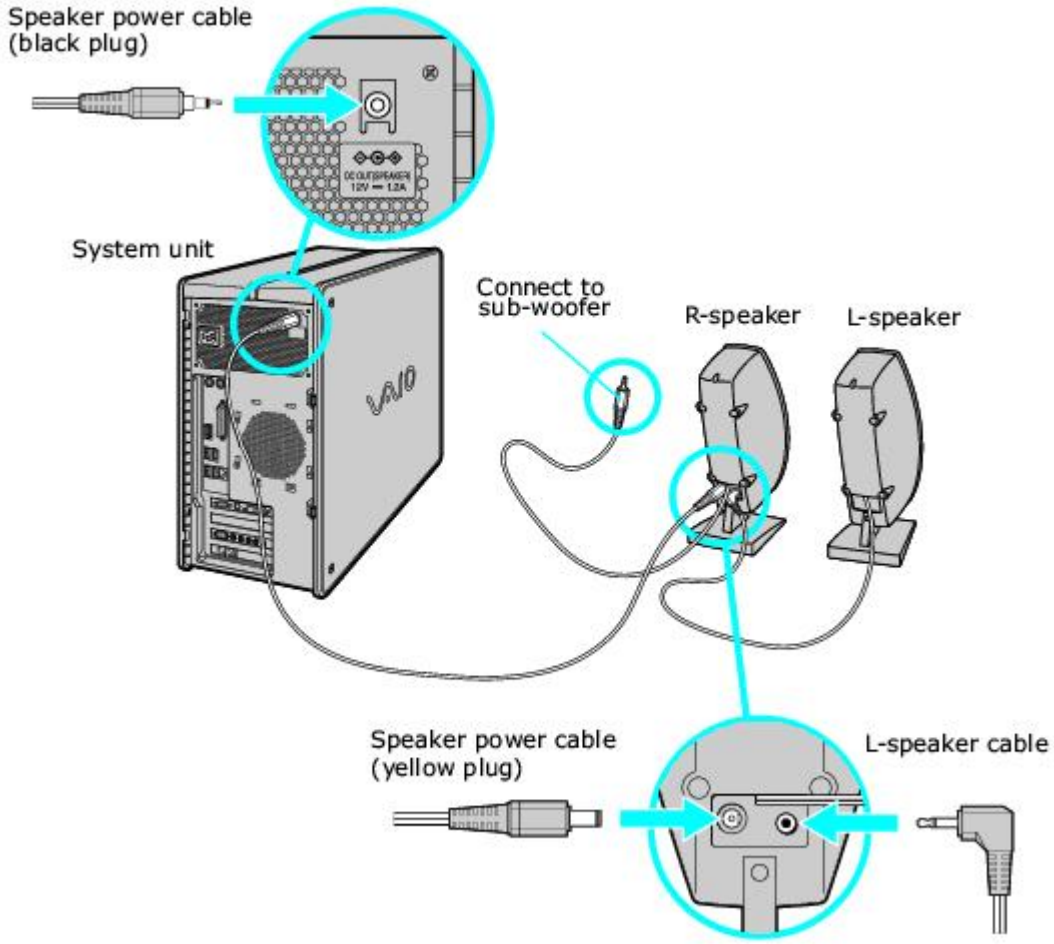


Install your equipment so that you can easily reach the power outlet in the event of an emergency.

Connecting the Speakers and Sub-woofer Unit

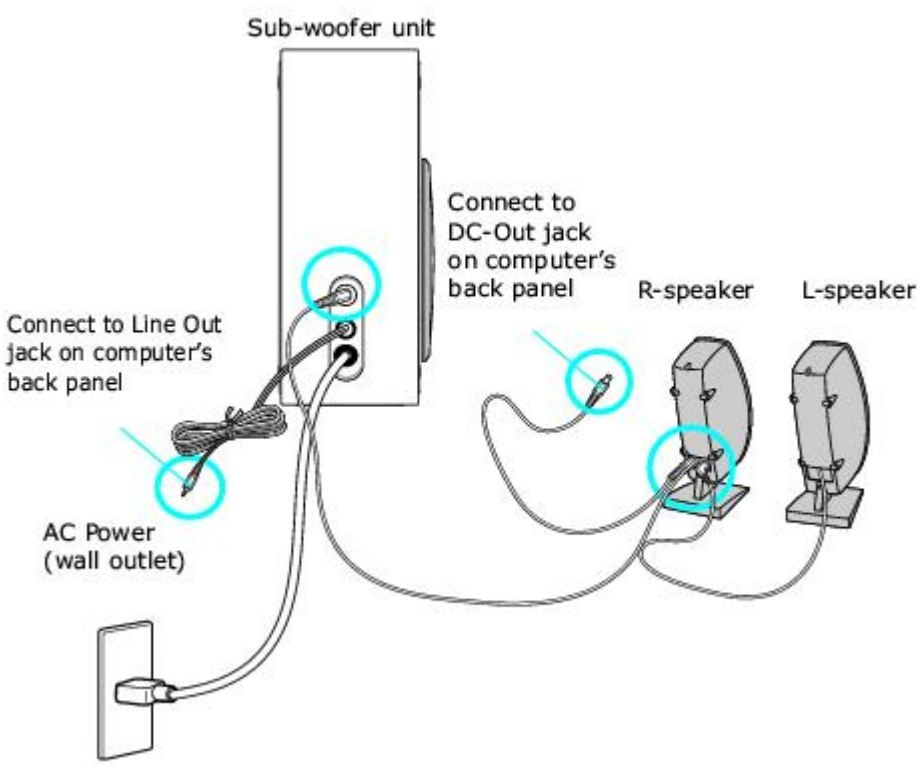
1. Plug the cable attached to the back of the left speaker into the L Out jack on the back of the right speaker.
2. Insert the yellow plug of the speaker power cable into the DC In jack (yellow) on the back of the right speaker.
3. Insert the black plug of the speaker power cable into the DC Out jack located on the back panel of your computer.

To connect the computer and speakers



4. Insert the RCA plug of the cable that is attached to the right speaker into the speaker jack, located on the left side of the sub-woofer unit.

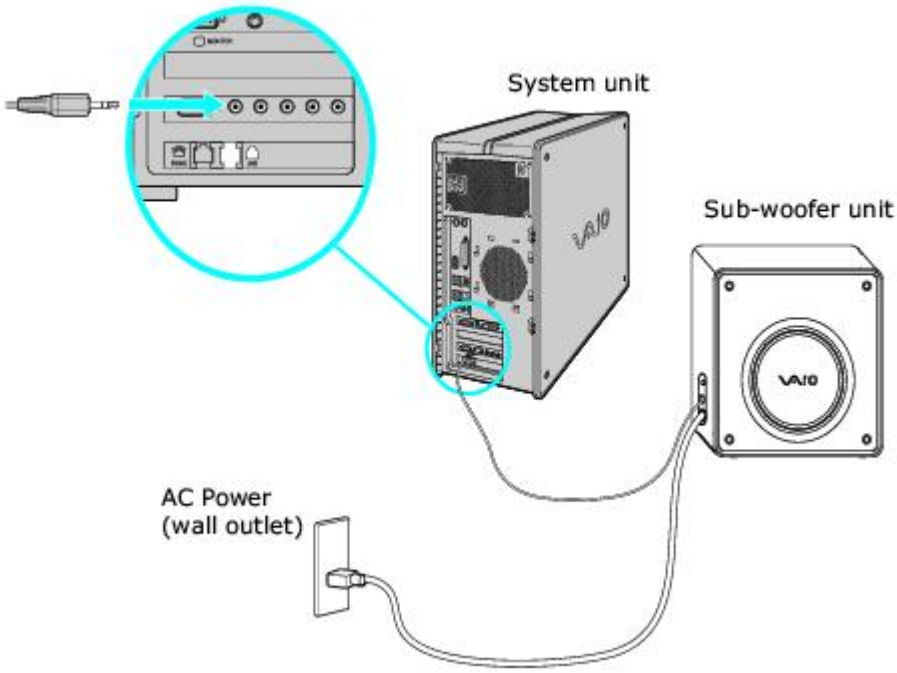
To connect the sub-woofer unit and speakers



5. Insert the RCA plug of the sub-woofer unit's cable into the Line Out jack, located on the back panel of your computer.

6. Plug the sub-woofer unit's power cord into a grounded AC wall outlet or power strip.

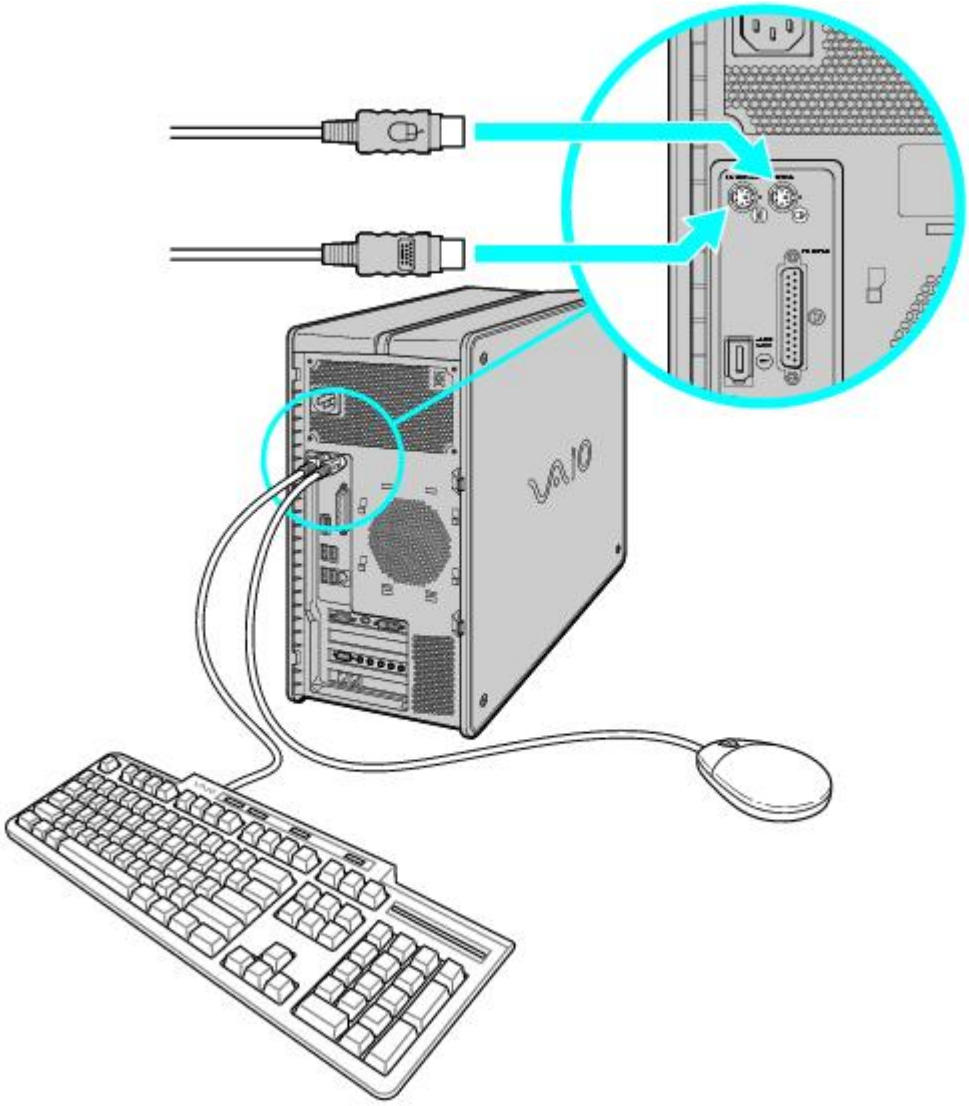
To connect the sub-woofer to the computer



Connecting the Keyboard and Mouse

1. Plug the keyboard cable into the keyboard port on the back of the computer.
2. Plug the mouse cable into the mouse port on the back of the computer.

To connect the keyboard and mouse



To use an optical mouse

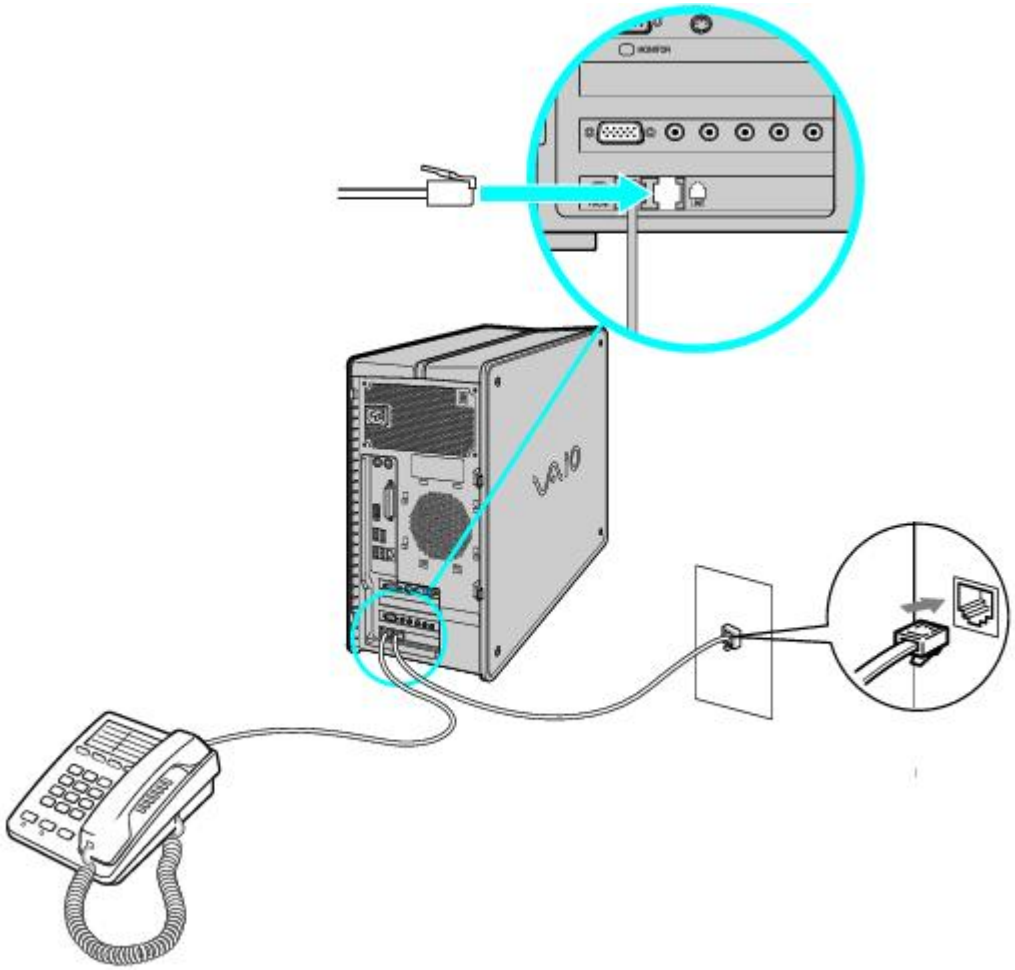
An optical mouse requires an ideal surface texture in order to provide precision pointing and tracking.

- Use surfaces such as plain paper, card stock, or fabric that have minimal repetitive patterning.
- Avoid surfaces such as mirrors, smooth glass, or magazines that have half-tone printing.

Connecting the Telephone and Modem cables

1. Unplug your telephone from the wall jack and plug it into the telephone jack, located on the back panel of your computer.
2. Plug the modem cable (supplied) into the Modem line jack, located on the back panel of your computer.
3. Plug the other end of the modem cable into the wall jack.

To connect the telephone and modem cables

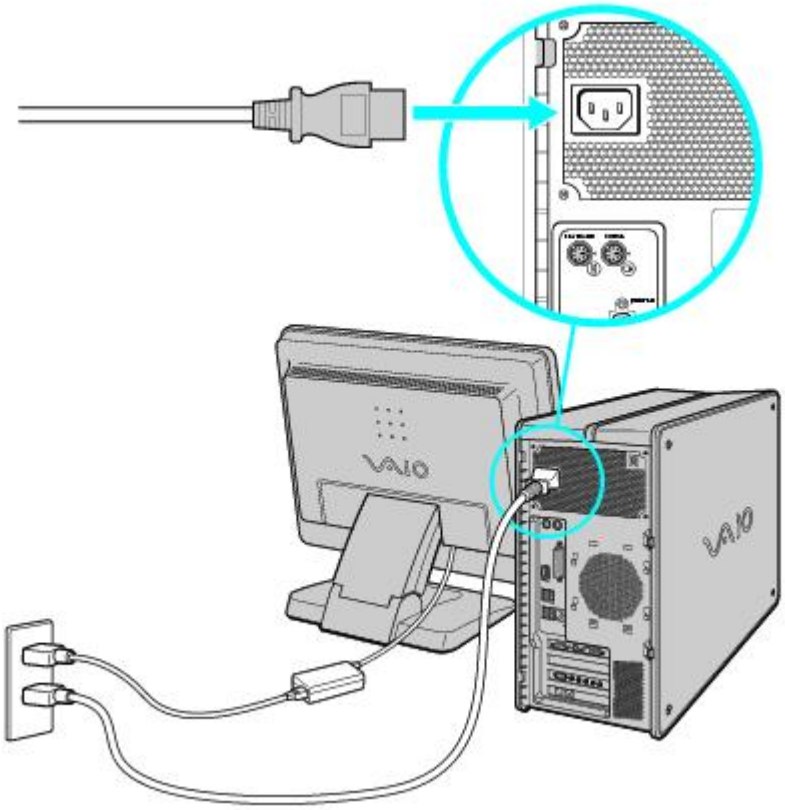


Your computer has a protective sticker covering the Ethernet port located on the rear panel. Connect 10BASE-T, 100BASE-TX or 1000BASE-TX cables to the Ethernet port. Using other cables or a telephone cable may result in an electric current overload that can cause a malfunction, excessive heat, or fire in the Ethernet port. For help on connecting to a network, see your network administrator.

Connecting the Power Cords

1. Plug the power cord into the back of the computer.
2. Plug both the display and computer power cords into a grounded AC wall outlet or a power strip.

To connect the power cords

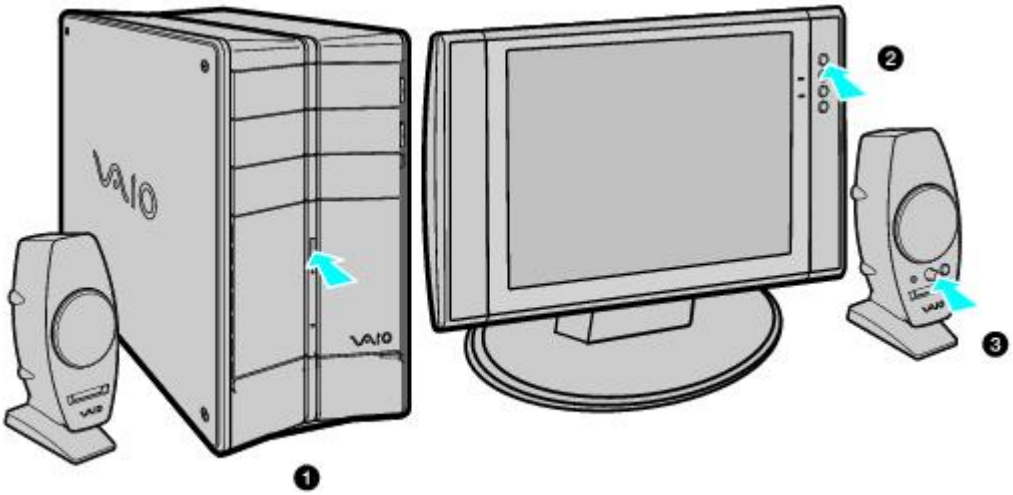


Turning On your Computer

When you start your system for the first time, your computer may detect new equipment and display a dialog box that prompts you to restart your computer. Respond to this prompt immediately.

1. Press the power switch on the computer to turn on the power.
2. Press the power switch on the display to turn on the power.
3. Press the power switch on the right speaker to turn on the power.

To turn on your computer



Registering your Computer

Take advantage of Sony's commitment to quality customer support and receive these benefits by registering your computer:

- **Sony Customer Support —** Communicate with a Support Representative to troubleshoot problems you may be having with your computer.
- **Limited warranty —** Protect your investment. See the Limited Warranty Card for more details.

You are prompted to register your computer the first time you turn on the unit. Follow the on-screen instructions to complete the registration process. If you are not able to register your computer during the first session, you are provided with additional registration opportunities later.

Configuring Your VAIO Computer

This section provides basic information about managing your computer's hard disk drive performance, using i.LINK devices, CompactFlash® cards, SmartMedia cards, Memory Stick media, PC Cards, and changing default settings. Your computer may not be equipped with all of the hardware features described in this section, depending on the system configuration purchased. To view the specific hardware configuration for your computer, see the online *Specifications* sheet.

- About the Memory Stick Media Slot
- About the SmartMedia Card Slot
- About the CompactFlash/Microdrive Media Slot
- About i.LINK Compatibility

About the Memory Stick Media Slot

Your VAIO® computer is equipped with a Memory Stick® slot that supports certain types of Memory Stick® media.

About Memory Stick media

Memory Stick® media are a compact, portable, and versatile data storage media designed for exchanging and sharing digital data with compatible devices. The following types of Memory Stick media are available, but compatibility with your computer can vary.

- **MagicGate Memory Stick® media** — Provides copyright protection with authentication and encryption, using Sony® MagicGate technology. Authentication ensures that protected content is only transferred between compliant devices and media. Protected content can be recorded and transferred in an encrypted format that prevents unauthorized duplication or playback. You can store different data formats on a single Memory Stick media.

- **Memory Stick PRO media** — Provides MagicGate copyright protection and high-speed data transfer features when used with compatible Memory Stick PRO devices. VAIO® computers support Memory Stick PRO media for data storage purposes only. Currently, high-speed data transfer and the MagicGate technology features, such as authentication and encryption, are not available. You can store different data formats on a single Memory Stick media.

- **Memory Stick® media** — Provides data storage only. The Memory Stick media does not provide MagicGate technology or high-speed data transfer. You can store different data formats on a single Memory Stick media.

Currently, Sony® SonicStage and OpenMG software are not compatible with the new Memory Stick PRO media. Sony suggests using only MagicGate Memory Stick media to store and transfer any data created with SonicStage or OpenMG software.

Visit the Sony Online Support Web site at http://www.sony.com/pcsupport regularly for the latest information on Memory Stick® media.

Memory Stick media do not support video file playback directly from the media. Copy the video file to your hard disk drive and then play back the file.

Inserting a Memory Stick media

1. Insert the Memory Stick® media into the Memory Stick media slot.
2. Use your fingertip to pull open the upper front panel cover.
3. If the media does not insert easily, remove it from the slot and verify that it is not upside-down or backwards. Carefully reinsert the Memory Stick media, but do not force it into the slot.

Removing a Memory Stick media

A small portion of the Memory Stick media remains extended when it is inserted into the Memory Stick media slot.

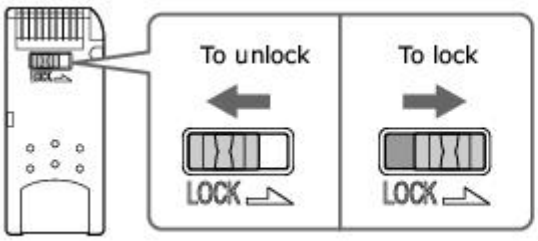
1. Press the extended portion of the Memory Stick media to release it from the Memory Stick slot. The media extends further, enabling you to grasp it.
2. Remove the Memory Stick media from the slot carefully.

Do not remove the Memory Stick media while the media access indicator light is on. The media or its data may become damaged.

Protecting data on Memory Stick media

Memory Stick media contain a write-protect tab. The write-protect tab prevents accidental changes to information recorded on your Memory Stick media. When you slide the write-protect tab to the LOCK position, your Memory Stick media is write-protected. You cannot delete, copy, or save information on the media while the write-protect tab in the LOCK position. When you slide the tab to the un-LOCK position, you can write to or modify your Memory Stick media's contents.

Locking the Memory Stick Media



Additional information about Memory Stick media

If your computer does not recognize your Memory Stick® media, you may have removed the media from the Memory Stick slot before data access had completed. If this occurs, follow these steps:

1. Remove the Memory Stick media from the slot.
2. Shut down your computer by closing any open software programs, and then turn off your computer.
3. Wait approximately 30 seconds, and then restart your computer.

Your computer recognizes the Memory Stick media, when you insert it into the Memory Stick slot again.

About the SmartMedia Card Slot

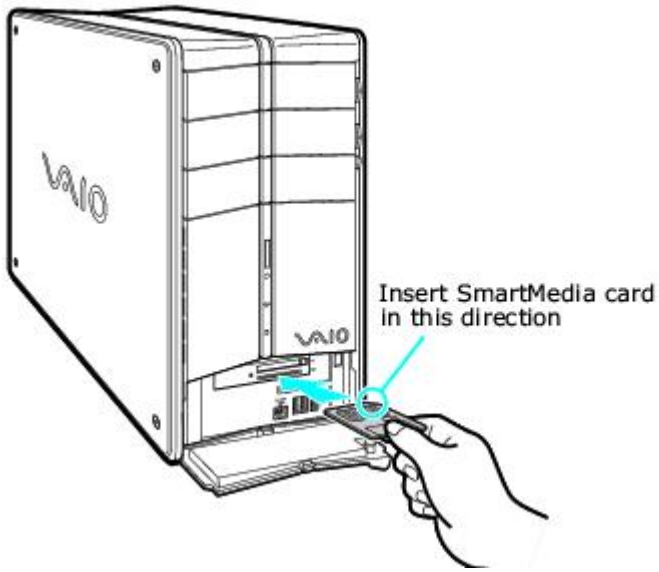
Your VAIO® computer is equipped with a SmartMedia card slot that supports SmartMedia cards.

Inserting a SmartMedia card

1. Insert a SmartMedia card into the SmartMedia card slot.

Always insert a SmartMedia card into the SmartMedia card slot for proper operation. Do not insert any other type of card into the SmartMedia card slot.

Inserting a SmartMedia card

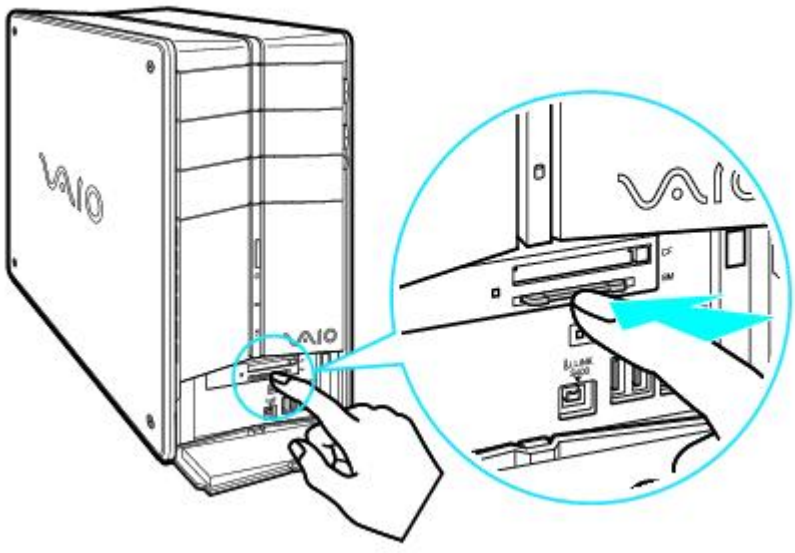


2. If the media does not insert easily, remove it from the slot and verify that it is not upside-down or backwards. Carefully reinsert the SmartMedia card, but do not force it into the slot.

Removing a SmartMedia card

1. Press the extended portion of the SmartMedia card to release it from the SmartMedia card slot. The media extends further, enabling you to grasp it.

Removing a SmartMedia card



2. Carefully remove the SmartMedia card from the slot.

Do not remove the SmartMedia card while the media access indicator light is on. The media or its data may become damaged.

Additional information about SmartMedia Cards

If you plan to share your media card between your VAIO® computer and devices such as a digital camera or music player, the media must be formatted properly.

- Format the media card by using it in the device first. See the information supplied with the device for details on formatting media.
- If your device does not recognize the media that has been formatted by your computer:

  1. Save the media contents to your hard disk drive.
  2. Reformat the media with the device.

About the CompactFlash/Microdrive Media Slot

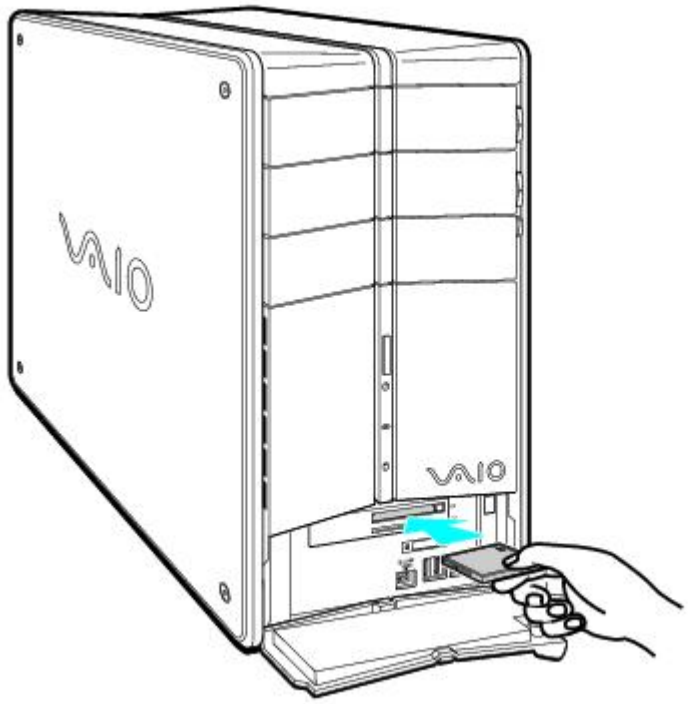
Your VAIO® computer may be equipped with a CompactFlash®/Microdrive media slot that supports CompactFlash and Microdrive media. For details on the specific hardware configuration for your system, see the online *Specifications* sheet.

Inserting a CompactFlash or Microdrive media card

1. Insert a CompactFlash or Microdrive media card into the card slot.

Always insert the appropriate media card into the CompactFlash/Microdrive media card slot for proper operation. Do not insert any other type of media card into the CompactFlash/Microdrive media slot.

Inserting a CompactFlash or Microdrive media card

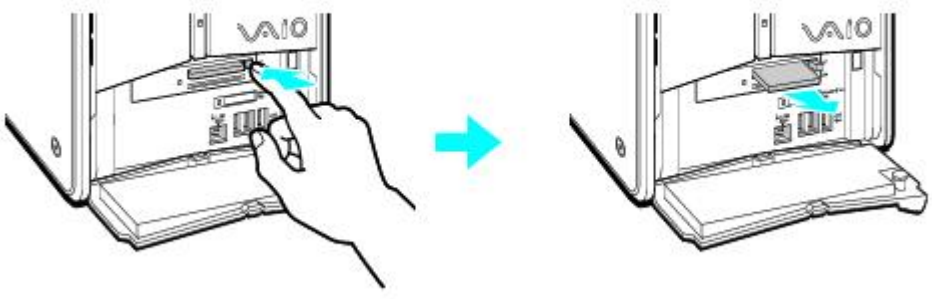


2. If the media does not insert easily, remove it from the slot and verify that it is not upside-down or backwards. Carefully reinsert the media card, but do not force it into the slot.

Removing a CompactFlash or Microdrive media card

1. Press the media card eject button to release it from the media card slot. The media extends further, enabling you to grasp it.

Removing a CompactFlash or Microdrive media card



2. Remove the media card from the slot carefully.

Do not remove the media card while the media access indicator light is on. The media or its data may become damaged.

Additional information about CompactFlash and Microdrive media Cards

If you plan to share your media card between your VAIO® computer and devices such as a digital camera or music player, the media must be formatted properly.

- Format the media card by using it in the device first. See the information supplied with the device for details on formatting media.
- If your device does not recognize the media that has been formatted by your computer:

  1. Save the media contents to your hard disk drive.
  2. Reformat the media with the device.

About i.LINK Compatibility

Your VAIO® computer may be equipped with a 4-pin and/or a 6-pin i.LINK® port, depending on the system configuration purchased. A 4-pin i.LINK port cannot supply power to a connected i.LINK device. A 6-pin i.LINK port can supply power (10V to 12V) to a connected i.LINK device, if the device is equipped with a 6-pin connector.

To view the hardware configuration for your computer, see the online *Specifications* sheet.

The total power supplied by the 6-pin i.LINK port cannot exceed 6 watts.

For PCV-W series models only

Your PCV-W series computer has two 4-pin i.LINK ports available to connect your digital devices. The 4-pin i.LINK ports do not supply power to a connected i.LINK device.

For PCV-V series models only

Your PCV-V series computer has one 4-pin i.LINK port available to connect your digital devices. The 4-pin i.LINK port does not supply power to a connected i.LINK device.

i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software programs, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other.

Please refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK devices to your system, such as an optical or hard disk drive, confirm their operating system compatibility and required operating conditions.

Connecting an i.LINK (IEEE 1394) device

1. Use the symbol to locate the i.LINK port on your compatible i.LINK device and on your computer. Plug the i.LINK cable connector into this port.
2. Plug the other end of the cable into the corresponding 4- or 6-pin i.LINK port on your computer.

See the instructions that came with your i.LINK device for more information on installation and use.

Upgrading and Maintaining your VAIO Computer

In the future you may want to increase the functionality of your VAIO computer. This section describes how to perform basic upgrades and maintenance on your system. For more information on upgrading your computer, see your model's *System Reference Manual*. You can download the *System Reference Manual* from the Sony Online Support Web site at http://www.sony.com/pcsupport.

- Overview
- About Opening the System Unit
- About Add-on Card Installation
- Installing Memory
- About the Lithium Battery
- About Hard Disk Drive Installation

Overview

The upgrading procedures described in this section assume that you are familiar with the general terminology associated with personal computers, safety practices, required regulatory compliances, and the modification of electronic equipment.

Before upgrading your computer

Disconnect the computer from its power source and from telecommunications links, networks, or modems before you open the unit or follow any procedures described in this section.

⚠ **Failure to disconnect your computer from its power source may result in personal injury or equipment damage. Always turn the power off before you open the system or connect your computer to peripheral equipment. Otherwise, damage may occur to the integrated circuits in your computer.**

Your computer may not be equipped with all of the hardware features mentioned in this section. The interior hardware configuration of your system may vary from the illustrations, depending on the computer purchased. To view the specific hardware configuration for your system, see the online specifications sheet.

✍ You may need to temporarily remove add-on cards or other components that may be near the slot cover you plan to remove.

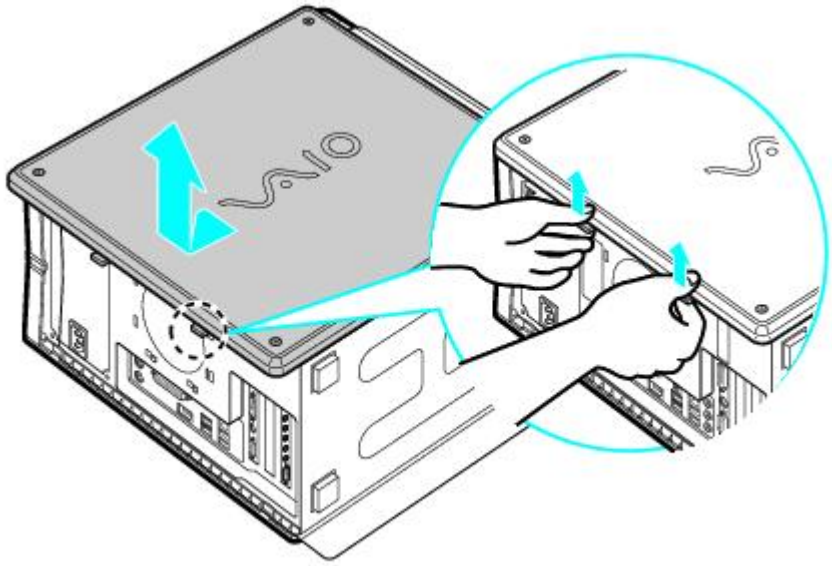
⚠ **Electrostatic discharge (ESD) can damage disk drives, add-on cards, and other components. Follow the procedures described here only at an ESD workstation. If such a station is not available, do not work in a carpeted area and do not handle materials that produce or hold static electricity (for example, cellophane wrappers). Ground yourself by maintaining continuous contact with an unpainted metal portion of the chassis while performing the procedure.**

About Opening the System Unit

Removing the side panel

1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and disconnect any peripheral devices.
3. Place the system unit on its side.
4. Locate the two tabs on the back edge of the right side panel.
5. Press up on these tabs and slide the side panel towards you.
6. Lift the side panel up and set aside.

Removing the side panel

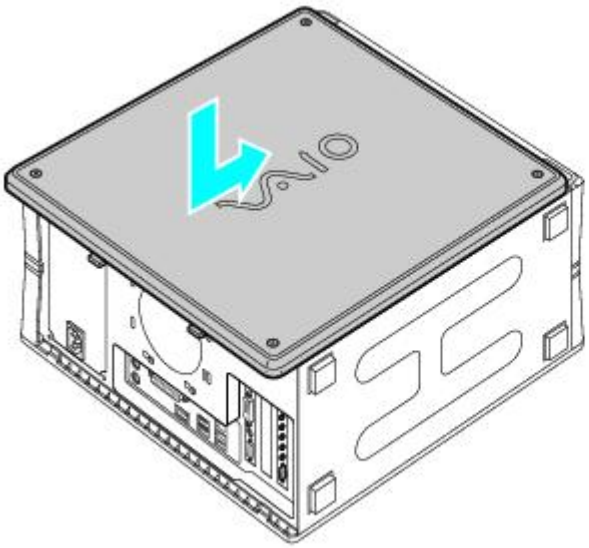


⚠ **If you remove the side panel immediately after you shut down your computer, the components may be too hot to touch. Wait until the internal parts of the system unit cool down before you attempt to remove the side panel.**

Replacing the side panel

1. Place the system unit on its side.
2. Align the tabs on the side panel to the tracks on the chassis frame.
3. Gently slide the side panel onto the chassis, until the tabs lock the panel into place.

Replacing the side panel



About Add-on Card Installation

Your computer may have one or more open expansion slots, depending on the model configuration. An expansion slot enables you to install add-on cards to expand the functionality of your system. The length of the add-on card should not exceed 9.05 inches.

Add-on card configuration varies by model. Some models, such as Configure-to-Order (CTO) systems, may contain preinstalled add-on cards.

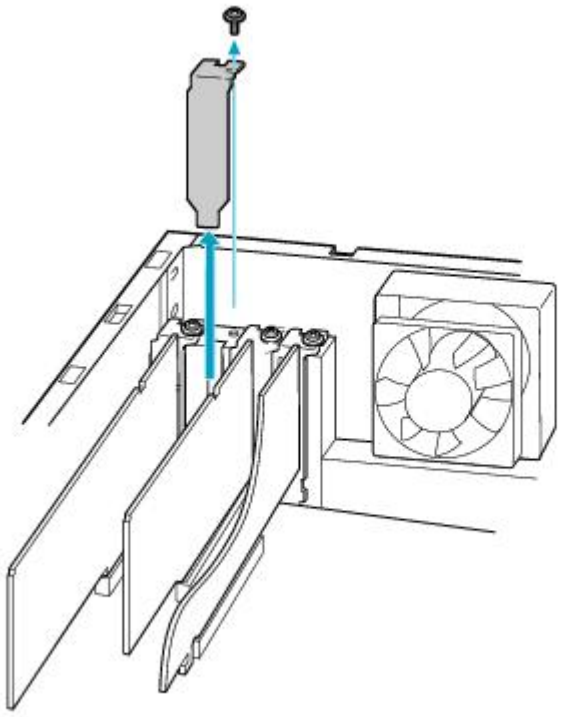
Observe the proper safety precautions when you add cards to your Sony computer. See Before upgrading your computer.

Installing an add-on card

1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and any peripheral devices.
3. Remove the side panel. See Removing the side panel.
4. Locate an available expansion slot. Remove the slot cover's screw, and then remove the slot cover.

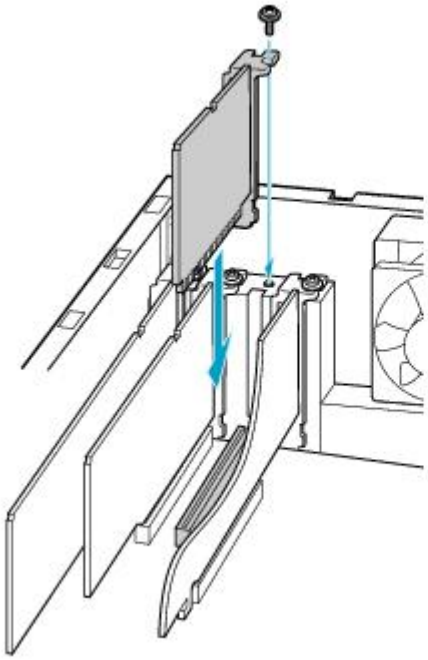
When removing a slot cover, be careful not to damage components on the system board or add-on cards. You may need to temporarily remove add-on cards or other components that may be next to the slot cover you want to remove.

Removing the slot cover



5. Install the add-on card by inserting it into the expansion slot and secure it with the screw from the expansion slot cover.

Installing an add-on card



6. Attach any internal cables that the card requires. See the instructions supplied with the add-on card.
7. Replace the side panel. See Replacing the side panel.
8. Reconnect the power cord and all peripheral devices.
9. Turn on the computer.

Installing Memory

The amount of preinstalled memory may vary, depending on the system configuration you purchased. Your computer may ship with all available memory slots filled. For memory replacement or upgrades, use the correct memory module for your computer's configuration. See the online *Specifications* sheet for details about the amount of memory installed in your computer.

You can purchase additional memory modules, accessories, and peripheral equipment from your local retailer.

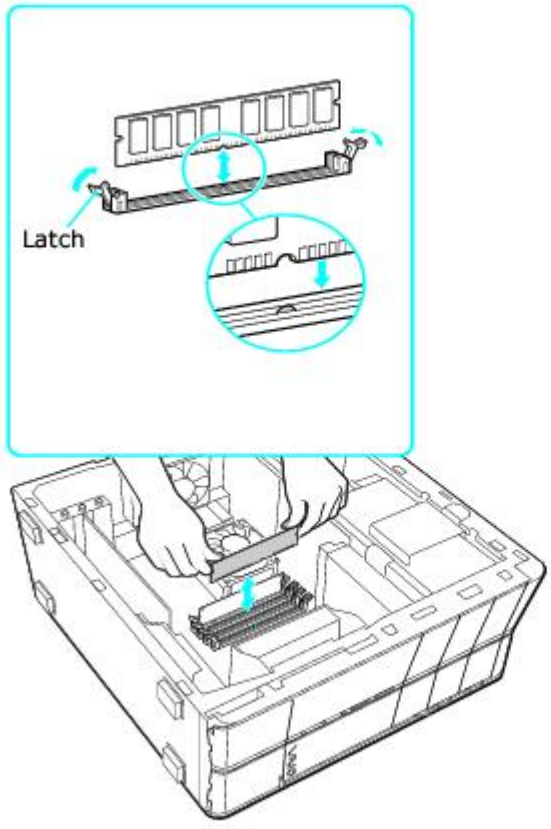
⚠ **Observe the proper safety precautions when you add or remove the memory in your computer. See Before upgrading your computer.**

Removing a memory module

1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and all peripheral devices.
3. Remove the side panel. See Removing the side panel.
4. Gently place the unit on its side. If necessary, remove any cables, add-on cards, or other components to access the memory module slots.
5. Locate the memory module(s) you wish to remove.
6. Push down on the latches, located on both sides of the module, to gently eject it from the slot.
7. Grasp one edge of the module and lift it out. Store the module in a static-free bag.

⚠ **Gently handle the memory module by the sides only. Avoid touching the pins located at the bottom edge of the module.**

Removing/Installing memory



Installing a memory module

1. Shut down your computer and turn off all peripheral devices, such as your printer.

2. Unplug your computer and any peripheral devices.
3. Remove the side panel. See Removing the side panel.
4. Gently place the unit on its side. If necessary, remove any cables, add-on cards, or other components to access the memory module slots.
5. Remove the memory module from its anti-static package, handling it by the the edges.
6. Locate the notch on the bottom edge of the module and align it over the open memory slot.
7. Firmly insert the bottom edge of the memory module into the slot.
8. Press down evenly against the module's upper corners. The end latches snap into position, holding the module in place.

To avoid damaging a memory module slot, move the end latches slightly outward to relieve pressure. The module clicks into place.

9. Reinstall any components or add-on cards you may have removed.
10. Replace the side panel. See Replacing the side panel.

About the Lithium Battery

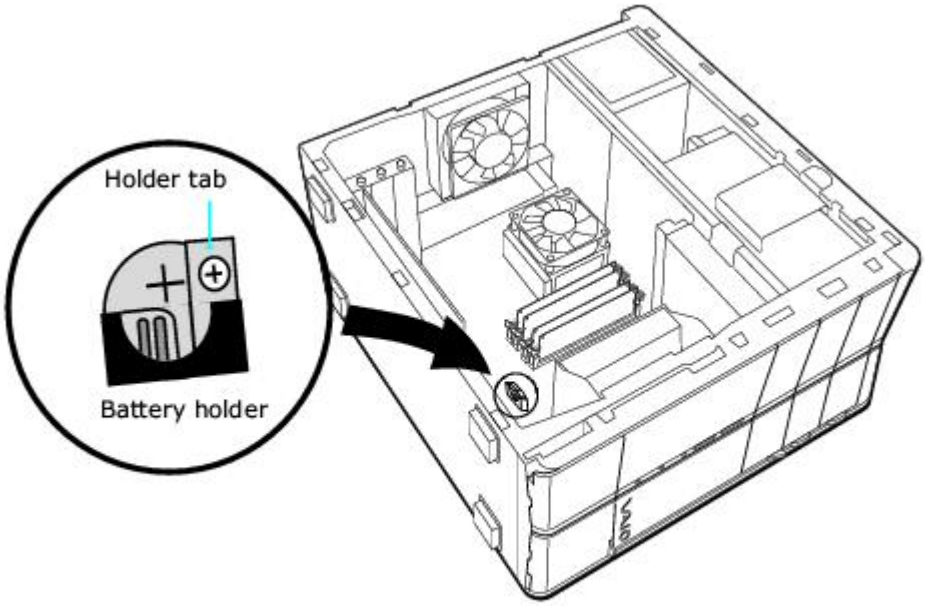
The lithium battery starts to weaken after several years and the system settings, such as the date and time stored in CMOS RAM, may become inaccurate. Replace the lithium battery when this occurs.

There is danger of the battery exploding if it is replaced incorrectly. Replace the battery only with a CR2032-type lithium battery.

Replacing the lithium battery

1. Write down any changes you may have made to the settings in the BIOS Setup utility.
2. Shut down your computer and turn off all peripheral devices, such as your printer.
3. Unplug your computer and the peripheral devices.
4. Remove the side panel. See Removing the side panel.
5. If necessary, remove any cables, add-on cards, or other components to access the lithium battery.
6. Gently push the battery holder's tab away from the battery and remove the battery from the holder.
7. Install the new battery with the plus (+) side facing the battery holder tab.

Installing a lithium battery



8. Replace the side panel. See Replacing the side panel.

The values stored in the CMOS memory are now reset to the factory default values. Run the Setup utility to reset the date, time, passwords, and other changes you may have made to the BIOS settings. If you do not wish to customize your BIOS settings, do not run the Setup utility.

Dispose of the lithium battery properly. In some areas, the disposal of lithium batteries in household or business trash may be prohibited. You can return your unwanted lithium batteries to your nearest Sony Service Center or Factory Service Center. To locate a Service Center near you, visit the Sony Online Support Web site at http://www.sony.com/pcsupport.

Resetting the computer's date and time

To reset your computer's date and time:

1. Double-click the time readout displayed in the Windows® Taskbar Notification area. The Date and Time properties window appears.
2. From the Date & Time tab, change the settings as desired. Click **Apply**, and then click **OK**.

About Hard Disk Drive Installation

Your computer comes with an available internal bay to hold a second standard 3½-inch hard disk drive. Some models, such as Configure-to-Order (CTO) systems, may already have a second hard disk drive installed. Your system can support ATA-33, ATA-66, or ATA-100 hard disk drives. Sony recommends using an ATA-100 hard disk drive to take full advantage of your system's features.

✍ The hard disk drive access light blinks when either internal hard disk drive is active.

Replacing the original hard disk drive

If you replace the original, factory-installed hard disk drive, you may need to correct your drive mapping, create a VAIO Recovery Media Kit, or visit the Sony Online Support Web site for more information.

Drive Mapping

When a new hard disk drive is installed, the original drive mapping[1] may be changed. The identified drives, including those for removable media[2], may not reflect correct drive/icon associations. For more information on how to correct your drive mapping, visit the Sony Online Support Web site at http://www.sony.com/pcsupport.

Hard disk drive recovery

When you replace the original hard disk drive, the preinstalled VAIO Recovery Wizard utility program cannot restore the drive partitions, operating system, or original software programs. Before replacing the hard disk drive, create a VAIO Recovery Media Kit or purchase a kit from Sony.

✍ Your VAIO® computer is not supplied with System or Application Recovery CDs. Use the VAIO Recovery Wizard utility to recover your computer's operating system and preinstalled software programs.

For more information about the VAIO Recovery Wizard utility program:

1. Click **Start** from the Windows® taskbar, and then click **Help and Support**.
2. From the **VAIO Help and Support Center**, click **VAIO Recovery Options**.

Using the Sony Online Support Web site

For detailed information about installing additional hard disk drives, see the *System Reference Manual*. You can download the *System Reference Manual* from the Sony Online Support Web site at: http://www.sony.com/pcsupport.

✍ Your computer must be connected to the Internet to access the Sony Online Support Web site.

From the Sony support Web site:

1. Click on **Computers & Peripherals.**
2. Use the drop-down list boxes to select your product, series, and model information. Click **Model Support Page**. The model-specific support Web page appears.
3. Under **Documentation**, click ***System Reference Manual*** or ***System Reference Guide***.

⚠ **Observe the proper safety precautions when you upgrade your Sony computer. See Before upgrading your computer.**

Installing an additional hard disk drive

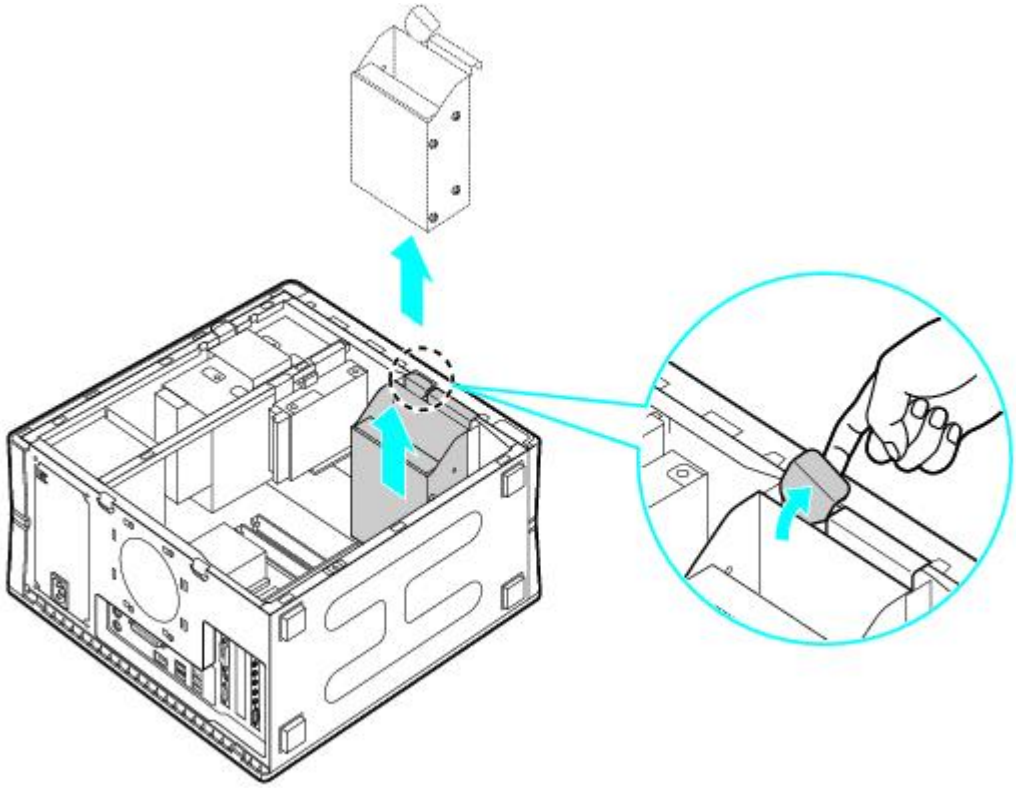
1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and any peripheral devices.
3. Remove the side panel. See Removing the side panel.
4. Configure the jumpers on the new drive as a slave. See the configuration instructions supplied with your drive.

5. Detach the power and drive cables from the original hard disk drive that is preinstalled in your computer.

6. Unlock the drive holder from the chassis by pulling the drive holder tab up at a slight angle.

7. Slide the drive holder out.

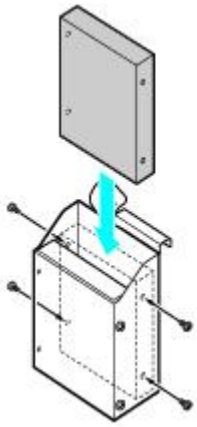
Removing the drive holder



8. Slide the new drive into the drive holder and align the holes on each side of the drive bay.

9. Secure the drive to the drive holder with screws, through the holes on each side of the drive holder.

Attaching the drive screws



Your new hard disk drive is supplied with the necessary screws. Do not overtighten these screws when securing the drive to the drive holder.

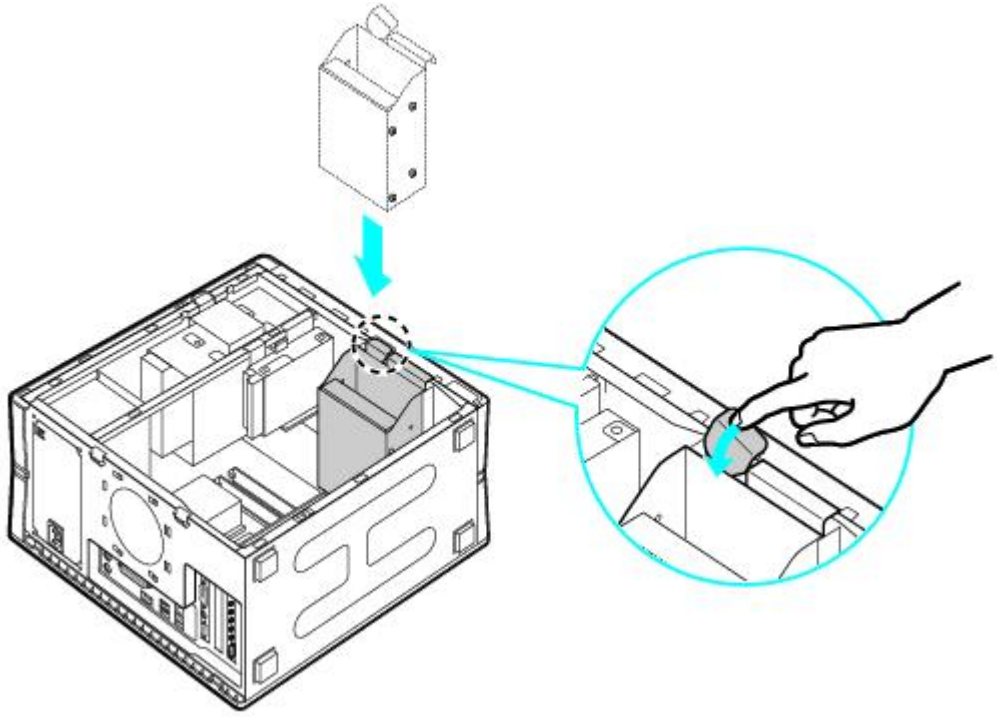
10. Align the drive holder with the tracks on the inside of the chassis. Slide the drive holder in completely.

11. Push down on the drive holder tab to lock the drive into position.

12. Connect the second drive connector to the new drive. Orient the connector to align pin 1 on the red side of the ribbon cable with pin 1 on the new drive.

13. Connect the second power connector to the new drive following the instructions supplied with the drive.

Replacing the drive holder



14. Replace the side panel. See Replacing the side panel.

15. Reconnect the power cord to your computer.

Identifying the additional hard disk space

When you initialize the new hard disk, it must be configured as an extended partition in Windows NT file system (NTFS) format.

1. Log on to Windows® as Administrator.

2. Click **Start** in the Windows taskbar, then right-click **My Computer**. A shortcut menu appears.

3. Select **Manage**. The Computer Management window appears.

4. Under the file directory on the right, go to **Storage** and then select **Disk Management**.

5. Right-click on the newly installed, unformatted hard disk (Disk label identified with red marking). From the shortcut menu, select **Initialize Disk**.

6. Click on the Unallocated area of the disk and then right-click to display a shortcut menu.

7. Select **New Partition**. The New Partition wizard appears.

8. Follow the wizard's on-screen instructions to complete the process.

The Windows® XP operating system recognizes the new hard disk drive and applies the NTFS format.

[1] Drive mapping refers to the assignment of an identifying letter to a specific drive, such as Drive C or Drive D which identify the original hard disk drive.

[2] Your computer may be equipped with removable media drives, such as a Memory Stick®, SmartMedia , CompactFlash®, or Microdrive media slot. See the online Specification sheet for more information about your computer's hardware configuration.

Troubleshooting

This section describes how to troubleshoot common problems. You can also find helpful information on how to use your computer's hardware features and preinstalled software. Your computer may not be equipped with all of the features or software discussed in this section, depending on the system configuration purchased.

- About VAIO Computer Functions
- About Using the Optical Disc Drive(s)
- About the Mouse and Keyboard
- About the Modem
- About the Speakers
- About Using a Microphone
- About Using Peripheral Equipment

My computer does not start.

- Verify that the computer is plugged into a power source and that it is turned on. Check that the power indicator is lit on the front panel of the computer.
- Confirm that a disk is not in the floppy disk drive[1] (unless you are using a bootable floppy disk).
- Confirm that a CD is not in an optical drive (unless you are using a bootable CD).
- Confirm that the power cord and all cables are connected firmly.
- If you plugged the computer into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- Verify that the monitor is plugged into a power source and turned on.

  If your system has a built-in monitor, confirm that it is plugged into an appropriate power source and that the system is turned on.
- Verify that the brightness or contrast control dials are adjusted correctly. (See the manual that came with your display for details.)
- Confirm that the computer is not in stand by mode by pressing any key on the keyboard.

[1] Certain VAIO computers are not equipped with a floppy disk drive. You can purchase this equipment separately.

My computer does not start.

- Verify that the computer is plugged into a power source and that it is turned on. Check that the power indicator is lit on the front panel of the computer.
- Confirm that a disk is not in the floppy disk drive[1] (unless you are using a bootable floppy disk).
- Confirm that a CD is not in an optical drive (unless you are using a bootable CD).
- Confirm that the power cord and all cables are connected firmly.
- If you plugged the computer into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- Verify that the monitor is plugged into a power source and turned on.

  If your system has a built-in monitor, confirm that it is plugged into an appropriate power source and that the system is turned on.
- Verify that the brightness or contrast control dials are adjusted correctly. (See the manual that came with your display for details.)
- Confirm that the computer is not in stand by mode by pressing any key on the keyboard.

[1] Certain VAIO computers are not equipped with a floppy disk drive. You can purchase this equipment separately.

Why did my computer or software stop responding?

You can try to locate and close the software application that has stopped responding.

1. Press the **Ctrl+Alt+Delete** keys. The **Windows Task Manager** window appears.
2. From the Applications tab, locate the application that has the status message, "**Not responding**."
3. Select the application that has a **Not Responding** status and click **End Task**. Windows attempts to close the application.

If your computer does not respond or the application does not close, try the following steps:

1. Save any open files, if possible.
2. Press the **Alt+F4** keys. The **Turn Off Computer** window appears.
3. Click **Restart**.

If your computer still does not respond and you cannot restart, shut down your computer by pressing and holding the power button for more than six seconds.

If the software application continues to stop responding or causes your computer to stop responding, contact the software publisher or designated technical support provider.

Pressing and holding the power button for more than six seconds may result in the loss of data from files that are currently open.

Why does the Windows operating system stop responding during shutdown?

The Windows operating system may not shut down properly for many reasons, including incompatible or conflicting drivers, damaged files, or non-responsive hardware. For troubleshooting information, you can search Windows Help.

1. Click **Start** in the Windows taskbar and select **Help and Support**. The **VAIO Help And Support Center** menu appears.

2. Select **Fixing a Problem** and then select **Startup and Shut Down problems**. A list of specific problem topics appears on the right side of the dialog box.

3. Select **Startup and Shutdown Troubleshooter**. Follow the on-screen instructions according to your specific situation.

Why is my system running slowly?

- The system responsiveness varies depending with the number of applications that are open and running. Close any applications that you are not currently using.
- Increasing the system memory may also help. For information on installing memory, please see the online VAIO User Guide.

To access the online User Guide:

1. Click **Start** in the Windows taskbar, and then click **Help and Support**.
2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.

How do I change the video resolution of my display?

1. Click **Start** in the Windows taskbar, and then select **Control Panel**.
2. Select **Appearance and Themes**, and then select **Change the screen resolution**.
3. Click the **Settings** tab.
4. Change the Screen resolution and Color quality to the desired levels.
5. Click **Apply** and then click **OK**.

About Using the Optical Disc Drive(s)

Your computer may not be equipped with all of the hardware features listed in this section. To view the specific hardware configuration for your system, see the online *Specifications* sheet.

Why doesn't my optical drive tray open?

To use the Eject button

1. Make sure the computer is turned on.
2. Press the Eject button on the drive.

To use the My Computer icon

1. Click **Start** in the Windows taskbar, then select **My Computer**.
2. Right-click the appropriate optical drive icon.
3. Select **Eject** from the shortcut menu.

✍ Avoid using adhesive labels to identify your CD or DVD media. Adhesive labels may come off while the CD or DVD media is in use in your optical drive(s) and may cause damage to the unit.

Why can't I play a DVD or CD media?

- After inserting your CD or DVD, wait a few seconds for the system to detect it before trying to access it.
- Confirm that the disc is in the tray with the label side facing up.
- Install your CD or DVD software according to the manufacturer's instructions.
- If your drive reads some DVDs or CDs, but not others, check the shiny side of the disc for dirt or scratches.
- The preinstalled CD or DVD software may not be working properly. To recover this software, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

Why isn't my DVD playing properly?

- If a region code warning appears when you are using the DVD player application, it may be that the region code of the DVD you are trying to play is incompatible with the region code setting of your optical drive. A region code is listed on the disc packaging. Region code indicators such as "1" or "ALL" are labeled on some DVDs to indicate the type of player that can play the disc. Unless a "1" or "ALL" appears on the DVD or on its packaging, you cannot play the disc on this system.

- If you hear audio but cannot see video, your computer's video resolution may be set too high. To improve video resolution, verify that your screen area is set to 1024 x 768[1], using 32-bit color (preset factory default). To verify or change your video resolution:

    1. Click **Start** in the Windows taskbar and then select **Control Panel**.
    2. Select **Appearance and Themes**, then select **Change the screen resolution**.
    3. Click the **Settings** tab.
    4. Change the Screen resolution and Color quality to the desired levels.
    5. Click **Apply** and then click **OK**.

- If you see video but cannot hear audio, check all of the following:

    1. Verify that your DVD player's mute feature is turned off.
    2. Check the master volume setting in the Audio Mixer.
    3. Check the volume settings on your computer speakers.
    4. Check the connections between your speakers and the computer.
    5. Verify that drivers are installed properly, by following these steps:

        1. Click **Start** in the Windows taskbar, then select **Control Panel**.
        2. Click **Performance and Maintenance** and then click **Systems**. The System Properties dialog box appears.
        3. Select the **Hardware** tab and then select the **Device Manager** button to view installed drivers.

- A dirty or damaged disc may also cause the computer to stop responding while it tries to read the disc. If necessary, remove the disc and check that it is not dirty or damaged.

- The preinstalled CD or DVD software may not be working properly. To recover this software, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

    1. Click **Start** in the Windows® taskbar and click **Help and Support**.
    2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

[1] The VAIO "W" series computer uses 1280 x 768 for the default video resolution setting.

Why doesn't my mouse work properly?

- Confirm that the mouse is plugged securely into the mouse port. If you are using a USB mouse, verify that the mouse is plugged securely into the appropriate USB port.
- Save and close all open applications. Turn off your computer, wait approximately 10 seconds, and then restart your computer.
- If you are using an optical mouse[1], use an appropriate surface to ensure proper mouse tracking. A good mouse surface requires a certain amount of detail or texture to enable mouse tracking.
  - Use surfaces such as plain paper, card stock, or fabric that do not have a lot of repetitive patterning.
  - Avoid surfaces such as mirrors, smooth glass, or magazines.
  - Avoid possible damage to easily-scratched surfaces by using a mouse pad.
  - Avoid surfaces that may damage or soil your optical mouse. Dirt or damage may cause the mouse to malfunction.
  - If the cursor is not moving properly, try using the mouse on another mousing surface or using a mouse pad.
- If you are using a trackball mouse, there may be dust or dirt inside the mouse mechanism. To clean the mouse, follow these steps:
  - Save and close all applications, and turn off your computer.
  - Turn the mouse upside down.
  - Remove the mouse ball cover on the back of the mouse by turning clockwise the ring that covers the mouse ball.
  - Turn the mouse upright, and drop the mouse ball into your hand.
  - Using a piece of tape, remove any dust or dirt on the mouse ball and inside the mouse ball socket.
  - Return the mouse ball to the socket, and replace the mouse ball cover. Secure the cover by turning the ring counter-clockwise.
- The mouse driver(s) may not be working properly. To recover your mouse drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:
  - Click **Start** in the Windows® taskbar and click **Help and Support**.
  - From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.
- If you are using a wireless optical mouse:
  - Confirm that the supplied AA batteries are properly installed.
  - Press the Connect button on the mouse and the computer to reestablish the connection between the two devices.

[1] For wireless or standard optical mice.

Why doesn't my mouse work properly?

- Confirm that the mouse is plugged securely into the mouse port. If you are using a USB mouse, verify that the mouse is plugged securely into the appropriate USB port.
- Save and close all open applications. Turn off your computer, wait approximately 10 seconds, and then restart your computer.
- If you are using an optical mouse[1], use an appropriate surface to ensure proper mouse tracking. A good mouse surface requires a certain amount of detail or texture to enable mouse tracking.
  - Use surfaces such as plain paper, card stock, or fabric that do not have a lot of repetitive patterning.
  - Avoid surfaces such as mirrors, smooth glass, or magazines.
  - Avoid possible damage to easily-scratched surfaces by using a mouse pad.
  - Avoid surfaces that may damage or soil your optical mouse. Dirt or damage may cause the mouse to malfunction.
  - If the cursor is not moving properly, try using the mouse on another mousing surface or using a mouse pad.
- If you are using a trackball mouse, there may be dust or dirt inside the mouse mechanism. To clean the mouse, follow these steps:
  - Save and close all applications, and turn off your computer.
  - Turn the mouse upside down.
  - Remove the mouse ball cover on the back of the mouse by turning clockwise the ring that covers the mouse ball.
  - Turn the mouse upright, and drop the mouse ball into your hand.
  - Using a piece of tape, remove any dust or dirt on the mouse ball and inside the mouse ball socket.
  - Return the mouse ball to the socket, and replace the mouse ball cover. Secure the cover by turning the ring counter-clockwise.
- The mouse driver(s) may not be working properly. To recover your mouse drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:
  - Click **Start** in the Windows® taskbar and click **Help and Support**.
  - From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.
- If you are using a wireless optical mouse:
  - Confirm that the supplied AA batteries are properly installed.
  - Press the Connect button on the mouse and the computer to reestablish the connection between the two devices.

[1] For wireless or standard optical mice.

How do I set up my mouse for left-hand use?

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Printers and Other Hardware**, then click **Mouse**. The Mouse Properties dialog box appears.
3. From the **Buttons** tab, select **Switch primary and secondary buttons** under the Button Configuration options.
4. Click **Apply**, then click **OK**.

Why doesn't my keyboard work properly?

- Check that the keyboard[1] is securely plugged into the keyboard port.
- Save and close all open applications. Turn off your computer, wait approximately 10 seconds, and then restart your computer.
- If you are using a wireless keyboard:

  1. Confirm that the supplied AA batteries are properly installed. For proper installation of the AA batteries, see About the Mouse and Keyboard.
  2. Press the Connect button on the keyboard to reestablish the connection between the two devices.

[1] The VAIO "W" series computer has a built-in keyboard.

Why is my modem connection slow?

Many factors can influence modem connection speed, such as:

- Telephone line noise.
- Incompatibility with other telephone equipment such as fax machines or other modems.
- Internet Service Providers (ISP) connection capability may vary.

If you think your modem is not connecting properly to other PC-based modems, fax machines, or your ISP, check the following:

- Contact your telephone company and ask them to verify that your telephone line is free from line noise.
- If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- For optimum performance, verify that your ISP point of presence (POP) telephone number is compliant with V.90 standards.
- If you are having a problem connecting with your ISP, check that they are not experiencing technical problems.
- Try connecting your modem through another telephone line, if available.

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- For optimum performance, verify that your ISP point of presence (POP) telephone number is compliant with V.90 standards.
- If you are having a problem connecting with your ISP, check that they are not experiencing technical problems.
- Try connecting your modem through another telephone line, if available.

Why doesn't my modem work properly?

Your modem may be experiencing equipment or software conflicts. If your modem is not functioning properly, check the following:

- Check that the telephone line is plugged into the modem line jack.
- Check that the telephone line is working properly. You can verify the line by plugging in an external device such as a standard telephone or fax machine and listening for a dial tone.
- Check that the access telephone number (POP) is correct.
- All software programs that are preinstalled by Sony are compatible with your computer's modem. If you have installed other software, contact the software publisher for information on how to configure the software in order to recognize the modem.
- If it appears that your modem is not functioning properly, check the device status.

  1. Click **Start** in the Windows taskbar, then click **Control Panel**.
  2. Click **Printers and Other Hardware** and then select **Phone and Modem Options**.
  3. From the **Modems** tab, click to select your modem.
  4. Click **Properties**. The Modem Properties window appears.
  5. Review the information in the Device status section. If your modem is not working properly, click the **Troubleshoot** button. The VAIO Help and Support Center window appears.
  6. Follow the on-screen instructions to resolve the problem.

- The modem driver(s) may not be working properly. To recover your modem drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

How do I change my modem to rotary or Touch-tone dialing?

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Printers and Other Hardware**, then click **Phone and Modem options**.
3. From the **Dialing Rules** tab, click **Edit**. The Edit Location dialog box appears.
4. Select the **Tone** or **Pulse** option. Click **OK**.

Why is there no sound in any application?

- Check that the speakers are plugged into the Headphones jack.
- If your speakers have a mute button, verify that it is turned off.
- If your speakers are powered by batteries, verify that the batteries are inserted properly and that they are charged.
- If your speakers use an external power source, verify that the power cord is plugged into a grounded wall outlet or power strip.
- If your speakers have volume control, check the volume level.
- You cannot hear sound from your speakers if headphones are connected to your computer.
- If the software application you are using has its own volume control, check that the volume is turned up.
- Check the volume controls in the Windows® operating system using these steps:

  1. Click **Start** in the Windows taskbar, then select **Control Panel**.
  2. Select **Sounds, Speech, and Audio Devices**, then click **Adjust the system volume**.
  3. From the **Volume** tab, adjust the Device volume by moving the slider bar to the desired sound level. Verify that the Mute option is not selected.

- Check that the Mute check box is not selected in the Windows volume control.
- The sound driver(s) may not be working properly. To recover your sound drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

For PCV-W series models only

- Adjust the volume control dial, located on the left panel, to adjust speaker volume.
- The speakers continue to produce sound even when headphones have been connected. If you want to use your own headphones instead of the supplied speakers, adjust the volume control dial, located on the left panel, to mute the sound from the built-in stereo speakers.

For PCV-V series models only

Adjust the volume by pressing the volume control buttons located on the wireless keyboard.

Why is there no sound in any application?

- Check that the speakers are plugged into the Headphones jack.
- If your speakers have a mute button, verify that it is turned off.
- If your speakers are powered by batteries, verify that the batteries are inserted properly and that they are charged.
- If your speakers use an external power source, verify that the power cord is plugged into a grounded wall outlet or power strip.
- If your speakers have volume control, check the volume level.
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  2. Select **Sounds, Speech, and Audio Devices**, then click **Adjust the system volume**.
  3. From the **Volume** tab, adjust the Device volume by moving the slider bar to the desired sound level. Verify that the Mute option is not selected.

- Check that the Mute check box is not selected in the Windows volume control.
- The sound driver(s) may not be working properly. To recover your sound drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

For PCV-W series models only

- Adjust the volume control dial, located on the left panel, to adjust speaker volume.
- The speakers continue to produce sound even when headphones have been connected. If you want to use your own headphones instead of the supplied speakers, adjust the volume control dial, located on the left panel, to mute the sound from the built-in stereo speakers.

For PCV-V series models only

Adjust the volume by pressing the volume control buttons located on the wireless keyboard.

Why can't I hear sound when using the SP/DIF option for digital output?

If your computer has a preinstalled Sound Blaster Audigy ES sound card[1], the Play Control settings must be changed to support digital sound. Follow these steps to change the settings:

1. From the Windows taskbar notification area, double-click on .

   The **Play Control** dialog box appears.

2. Click **Options**, and then click **Advanced Controls**. Click the **Advanced** button.

   The **Advanced Controls for Play Control** dialog box appears.

3. In the **Other Controls** box, click to select the option, **1 Digital Output Only**.

4. Click **Close**, and then close the **Play Control** dialog box.

[1] The Sound Blaster Audigy ES sound card is available with certain VAIO® computers. See your online Specifications sheet for information about your computer's hardware configuration.

About Using a Microphone

Why doesn't my microphone work properly?

Check that the microphone is plugged into the Microphone jack.

About Using a Microphone

Why doesn't my microphone work properly?

Check that the microphone is plugged into the Microphone jack.

Why is my microphone so sensitive to background noise?

If you find there is too much background noise when you record sound, you should adjust the microphone by following these steps:

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Sounds, Speech, and Audio Devices**, then click **Sounds and Audio Devices**.
3. From the **Audio** tab, locate the **Sound recording** section and click **Volume**. The **Recording Control** dialog box appears.

   If the volume control for the microphone is visible, skip to step 6.
4. Select the **Options** menu and click **Properties**. The **Properties** dialog box appears.
5. In the section, **Show the following volume controls**, select the **Recording** option. Click **OK**.
6. From the **Recording Control** dialog box, decrease the microphone volume level by moving the slider bar down.
7. Close the **Recording Control** dialog box and then close the **Sounds and Audio Devices Properties** window.

How do I install a printer?

- Connect your USB or IEEE 1394 printer to the appropriate port on your computer's front, back or side panels[1]. If your printer has a USB, IEEE 1394, or infrared connection, contact the printer manufacturer for information or updates that may be required for proper installation.
- Check the printer manufacturer's Web site for the latest drivers for your operating system before proceeding with installation. Some printers do not function properly without the updated drivers for specific operating systems.
- To install your printer, follow these steps:

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Printers and Other Hardware**, then click **Add a Printer**.
3. From the **Add Printer Wizard**, click **Next**.
4. Select **Local Printer**, then click **Next**.

   Place a check mark in the box for "Automatically detect and install my Plug and Play printer", if you are installing a recently manufactured printer with Plug and Play capability.
5. Select the appropriate port, usually LPT1, and then click **Next**.
6. Select the appropriate printer manufacturer and model.
7. Follow the on-screen instructions to print a test page and complete printer installation.

If the printer is not included in the list and the printer manufacturer included a disk with a Windows XP Printer driver, choose **Have Disk**, enter the appropriate path for the disk or CD and click **OK**.

If the printer is not included on the list and no drivers are included with the printer, choose an alternate printer driver that your printer may emulate. Refer to the manual that came with your printer for specific emulation information.

[1] The location of the connection ports for peripheral equipment may vary, depending upon your computer's hardware configuration.

How do I install a printer?

- Connect your USB or IEEE 1394 printer to the appropriate port on your computer's front, back or side panels[1]. If your printer has a USB, IEEE 1394, or infrared connection, contact the printer manufacturer for information or updates that may be required for proper installation.
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If the printer is not included on the list and no drivers are included with the printer, choose an alternate printer driver that your printer may emulate. Refer to the manual that came with your printer for specific emulation information.

[1] The location of the connection ports for peripheral equipment may vary, depending upon your computer's hardware configuration.

The connected printer does not function properly when the computer resumes from a power saving mode.

- Clear the printer memory by turning the printer off for approximately 10 seconds, and then turning it back on.
- If your printer does not resume normal operations, try restarting your computer.

Notes On Use

The information in this section provides basic procedures for handling your system and common peripheral devices, and using storage media.

- About the Power Source
- About Disposing of the Lithium Battery
- About Handling the Computer System
- About Handling a Monitor (Display)
- About Recording and Data Storage Media

About the Power Source

Before opening your computer, turn the system off and let it cool down for 10 minutes. This protects you against internal components that may be too hot to handle.

- Your computer operates on 100-120 V AC 50/60 Hz only.
- Plug all the power cords for your computer and its peripheral equipment into the same AC supply line. AC derived from different supply lines may result in voltage differences that can cause unstable operation or unwanted weak currents at the time of connection.
- Do not share the AC outlet with any other power-consuming equipment, such as copying machines or shredders.
- You can purchase a power strip with a surge protector. This device prevents damage to your computer caused by sudden power surges such as those that may occur during an electrical storm.
- If you live in an area that experiences frequent power fluctuations, you may want to purchase an Uninterruptible Power Supply (UPS). This device contains both a surge protector and a battery backup. The surge protector prevents damage to your computer caused by power surges. The battery backup safeguards your data during a brief period of power loss.
- The power control button on the front panel does not turn off the system AC power. To remove power from the system, you must turn off the computer and then unplug the AC power cord from the wall outlet or power strip.
- Do not place heavy objects on the power cord.
- Do not operate the system with the cover removed. Always reinstall the cover before turning on the system.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Unplug your computer from the wall outlet if you do not intend to use the computer for a long time.
- Do not attempt to open the power supply. There are no user-serviceable parts in the power supply. To avoid personal injury or damage to your equipment, refer the repair or replacement of the power supply to qualified personnel only.

About Disposing of the Lithium Battery

Dispose of the lithium battery properly. In some areas, the disposal of lithium batteries in household or business trash may be prohibited. You can return your unwanted lithium batteries to your nearest Sony Service Center or Factory Service Center. For the Sony Service Center nearest you, visit the Sony Online Support Web site at http://www.sony.com/pcsupport.

Do not handle damaged or leaking lithium batteries. The lithium battery may explode if mistreated. Do not disassemble it or dispose of it in fire.

Replace the battery with a Sony CR2032 lithium battery. Using a type of battery other than a CR2032 may present a risk of fire or explosion.

About Handling the Computer System

Your computer uses high-frequency radio signals and may cause interference to radio or TV reception. If this occurs, relocate the computer a suitable distance away from the TV or radio equipment.

- Do not place your Sony computer in a location subject to:
  - Heat sources, such as radiators or air ducts
  - Direct sunlight
  - Excessive dust
  - Mechanical vibration or shock
  - Strong magnets or speakers that are not magnetically shielded
  - Ambient temperature of more than 95ºF (35ºC) or less than 50ºF (10ºC)
  - High humidity, moisture, or rain
- Do not place electronic equipment near your computer. The computer's electromagnetic field may cause a malfunction.
- Provide adequate air circulation to prevent internal heat build-up. Do not place your computer on loose surfaces (such as rugs or blankets) or near materials (such as curtains or draperies) that may block its ventilation slots. Leave a space of at least 8 inches from the back panel of your computer.
- Clean the cabinet with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzine, as it may damage the finish of your Sony computer.
- Should any solid object or liquid fall into the cabinet, keyboard, or mouse, shut down your computer and then unplug it. You may want to have the computer checked by qualified personnel before operating it any further.
- Use only specified peripheral equipment and interface cables; otherwise, problems may result.
- Do not use cut or damaged connection cables.
- Always switch the power off before connecting your computer to peripheral equipment; otherwise, damage may occur to the integrated circuits in your computer.
- Your computer, keyboard, and mouse consist of high-precision electronic parts. Do not drop them or bump them against other objects.
- Your Sony computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple telephone lines or a private branch exchange (PBX).
- If the telephone company makes a service call to your home or office and determines that your computer is responsible for the problem, the telephone company may bill you for the service call. If you do not disconnect your computer when it is adversely affecting the telephone line, the telephone company has the right to disconnect your service until you correct the problem.

Moisture condensation

If your computer is brought directly from a cold location to a warm one, moisture may condense inside your computer. In this case, allow at least an hour before turning on your computer. If any problem occurs, unplug your computer, and contact your Sony Service Center.

The hard disk drive

- Do not place the computer in a location that is subject to vibration or shock.
- Do not move the computer during operation.
- Do not subject the computer to sudden changes in temperature.
- Do not turn off the power while the computer is accessing the hard disk drive.

About Handling a Monitor (Display)

- DVD playback and certain video-related software may not function correctly when your monitor is set to a high refresh rate. If your monitor does not play back video content properly, try setting the display to a lower refresh rate.
- Do not place the display near a strong magnetic force.
- Do not block the ventilation slots on the display.
- Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- A residual image may appear on the screen if the same image is displayed for a lengthy period of time. The image disappears after a period of time. You can use a screen saver to prevent residual images.
- The screen becomes warm during operation. This is normal and does not indicate a malfunction.

About handling an LCD monitor[1] (display)

- Do not place the display near a strong magnetic force.
- Do not block the ventilation slots on the display.
- Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- A residual image may appear on the screen if the same image is displayed for a lengthy period of time. The image disappears after a period of time. You can use a screen saver to prevent residual images.
- The screen becomes warm during operation. This is normal and does not indicate a malfunction.
- Do not leave the LCD in direct sunlight, as this may damage the screen. Use caution when using the computer near a window.
- Do not exert pressure on the LCD or scratch the surface, as this may cause the screen to malfunction.
- The LCD screen is manufactured using high-precision technology. On occasion, you may see tiny black or colored points on the LCD. This is normal and does not indicate a malfunction.
- Avoid rubbing the screen, as this can damage the LCD. Use a soft, dry cloth to clean the display.

[1] The PCV-W and PCV-V series models have a built-in LCD monitor.

About Recording and Data Storage Media

Handling CD or DVD media

- Do not touch the surface of the disc.
- Do not drop or bend the disc.
- Do not use adhesive labels to identify the disc. The label may come off while the disc is in use in the optical drive and damage the drive.

Cleaning CD or DVD media

- Fingerprints and dust on the surface of a disc may cause read errors. Proper care of the disc is essential to maintain its integrity. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- For normal cleaning, hold the disc by its edge and use a soft cloth to wipe the surface from the center out.
- If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry soft cloth.

Using Memory Stick media

- MagicGate Memory Stick and Memory Stick PRO media are the only media that support MagicGate technology. Currently, Sony® SonicStage and OpenMG software are not compatible with the new Memory Stick PRO media. Sony suggests using only the MagicGate Memory Stick media to store and transfer any data created with SonicStage and OpenMG software.
- Currently, the Memory Stick slot on VAIO® computers does not support the high-speed data transfer or access control features of the new Memory Stick PRO media.
- Visit the Customer Support Web site at http://www.sony.com/pcsupport regularly for the latest information on the new Memory Stick PRO media.

CompactFlash and SmartMedia cards

- Certain VAIO® computers support CompactFlash and SmartMedia cards, see the online *Specifications* sheet.
- Visit the Customer Support Web site at http://www.sony.com/pcsupport regularly for the latest information on CompactFlash and SmartMedia cards.

Handling floppy disks[1]

- Do not open the shutter manually and touch the surface of the floppy disk.
- Keep floppy disks away from magnets.
- Keep floppy disks away from direct sunlight and other heat sources.

[1] Certain VAIO computers are not equipped with a floppy disk drive. You can purchase a floppy disk drive separately, see the online specifications sheet.

Support Options

Sony provides several options to help solve common problems or to locate support for your VAIO® computer. This section describes all available resources and offers suggestions on how to access this information for maximum results.

- Immediate Help and Support
- Software Help and Support
- Resources for Additional Help and Support

Immediate Help and Support

You can locate helpful information immediately by consulting your hard copy guides and supplements, or by accessing the online Computer User Guide and the individual software Help files.

Your computer is supplied with these support options:

- **VAIO® Computer Quick Start —** The Quick Start contains information on how to set up your computer quickly and easily. You can find instructions on how to plan an ergonomic work space, connect power cords, cables and peripheral devices, register your computer with Sony, and establish a dial-up connection to the Internet. The Quick Start can also provide troubleshooting support, if problems occur.

- **VAIO® Computer User Guide —** The online User Guide provides information about configuring, maintaining, and upgrading your computer. This support resource offers a variety of available topics, enabling you to quickly view specific information using context-sensitive search features. To access the online manual:

  1. Click **Start** in the Windows® taskbar, then click **Help and Support**.

  2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.

- **Specifications —** The online specifications sheet describes the hardware and software configuration of your VAIO computer. To view this online information go to http://www.sony.com/pcsupport.

- **Preinstalled software Help files —** Each preinstalled software application provides online Help within the software, that describes the software's features. In these Help files, you can find tutorials that teach you to use the software and locate troubleshooting support, should problems occur. To access software Help files:

  1. Click **Start** in the Windows taskbar and point to **All Programs**. A submenu appears, listing all preinstalled software programs.

  2. Click the desired software application.[1] The software's main window appears.

  3. From the menu bar, click **Help**. The Help file appears.

- **VAIO Software** — Provides specific information on preinstalled software on your computer.

  To access this online software information

  1. Click **Start** in the Windows taskbar.

  2. Click **Welcome to VAIO Life**.

[1] You can locate the online Help for Sony software programs by pointing to the individual application's icon and selecting Help from the submenu.

Software Help and Support

The contact and support information for the preinstalled software on your system is located in this section. Sony software support is free of charge for 90 days after the original date of purchase.

Your computer may not be supplied with all of the software discussed in this section, depending on the computer purchased. To view information about the specific software preinstalled on your computer, see the software program's online Help.

Adobe® Photoshop® Elements
Adobe Systems Inc.

Using state-of-the-art image editing tools, you can unleash your artistic ability and create digital images for print, e-mail, and posting to the Web. The versatile image capturing options enable you to start working with digital and traditional photos immediately. Explore extensive creative possibilities for your personal images with Adobe Photoshop Elements software. Upgrade possible to Adobe® Photoshop® software.

For support information, see Adobe® Reader® (Adobe® Systems Inc.)

Adobe® Premiere® LE
Adobe Systems Inc.

Adobe Premiere LE software offers interface and editing tools for producing movies for video, multimedia, and the Web. View source clips and edited footage simultaneously on-screen. You can create your own personal video clips that are up to three hours in length, with complete audio-video synchronization. Upgrade possible to full version of Adobe® Premiere® software.

For support information, see Adobe® Reader® (Adobe® Systems Inc.)

Adobe® Premiere®
Adobe Systems Inc.

Professional digital video editing software that enables you to create professional video productions. Take advantage of the sophisticated new Adobe Title Designer, MPEG-2 export, DVD authoring, and powerful audio tools.

For support information, see Adobe® Reader® (Adobe® Systems Inc.)

Adobe® Reader®
Adobe Systems Inc.

Adobe Reader software enables you to view, navigate, and print electronic documents in Adobe's Portable Document Format (PDF), an open file format intended to preserve the fidelity of documents created on many major computer platforms.

Help and support information for Adobe® software programs:

web site http://www.adobe.com

telephone 800-685-3652

hours M - F, 6 AM - 5 PM PST

America Online® (Broadband or Dial-Up)
America Online, Inc.

America Online is a popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail. Manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

Help and support information for AOL® software programs:

web site http://www.aol.com

AT&T WorldNet® Service
AT&T Corp.

AT&T WorldNet Service offers fast, reliable Internet access. Customer benefits include Web-based e-mail, video e-mail, multiple e-mail accounts, free Web pages, online and live agent technical support, instant messaging, and parental controls.

Help and support information for AT&T Worldnet® software programs:

web site	http://help.att.net

Boingo Wireless
Boingo Wireless, Inc.

Boingo Wireless service offers Wi-Fi access in hundreds of hot spot locations, including airports, hotels, coffee shops, and other public spaces. Experience the Internet up to 100 times faster than dial-up, and enjoy being totally mobile.

Help and support information for Boingo Wireless software programs:

web site	http://www.boingo.com/servicecenter.html
telephone	800-880-4117
e-mail	support@boingo.com
hours	M - F, 4 AM - 10 PM PST Sat-Sun, 6 AM - 3 PM PST

Click to DVD
Sony Electronics Inc.

At the touch of a button, Click to DVD software allows you to automatically burn DVDs from a digital video device. Create DVDs by capturing video content straight from a digital video (DV) device or by importing video from stored files — and you can also edit the video if desired. Create DVD photo albums and slide shows with picture files or by importing pictures from a digital still camera. What's more, you can easily give a professional look to your DVDs by adding chapter menus, backgrounds, and menu screens. You're only a few clicks away from your own DVDs!

Help and support information for Sony® software programs:

web site	http://www.sony.com/pcsupport
telephone	888-4-SONY-PC (888-476-6972)
hours	7 days a week, 24 hours a day

CLIÉ Converter
Sony Electronics Inc.

CLIÉ Converter software is a plug-in application that converts Giga Pocket® Video Capsules into Movie Player format for playback on your Sony® CLIÉ handheld. After converting your Video Capsules, you can use CLIÉ Converter software to transfer them to Memory Stick® media or to save them to your hard disk drive for transfer to your CLIÉ handheld during your next HotSync® operation.

For support information, see Click to DVD (Sony Electronics Inc.).

Corel® WordPerfect®
Corel Corp.

WordPerfect software is a powerful word-processing tool that helps you produce newsletters, articles, reports, proposals, books, and other documents. This software enables you to add graphics, tables, and charts to documents. You can publish to paper, electronic media, and the World Wide Web. WordPerfect 10 software allows you to format, structure, and edit documents at any time and gives you complete control over the design. WordPerfect 10 software includes Quattro Pro® and Corel Presentations . It also includes CorelCENTRAL software, which has Day Planner, Calendar, Address Book, Mail, Card File, Memos, Alarms and Administration.

Help and support information for Corel® software programs:

web site http://www.corel.com

telephone 613-274-0500

CyberLink PowerDVD®
CyberLink Corp.

CyberLink PowerDVD® software offers high-quality playback of DVD movies on your computer. PowerDVD software includes all the controls you expect from a home DVD player, plus a range of additional features. For example, you can bookmark scenes to come back to them later. The customizable controls, advanced navigation bar, and dynamic player skins combine to deliver a premium viewing experience.

Help and support information for CyberLink® software programs:

web site http://www.gocyberlink.com/english/cs/support/index_tech.jsp

Drag'n Drop CD
DigiOn, Inc., and Easy Systems Japan Ltd.

Drag'n Drop CD software is designed to make CD creation simple. You can create your own audio or data CDs that can be read in most audio CD players or personal computers. With Drag'n Drop CD software, you can also back up CDs.

For support information, see Drag'n Drop CD+DVD (DigiOn, Inc., and Easy Systems Japan Ltd.)

Drag'n Drop CD+DVD
DigiOn, Inc., and Easy Systems Japan Ltd.

Drag'n Drop CD+DVD software is designed to make CD and DVD creation simple. You can create you own audio or data CDs and data DVDs. These discs can be read in most audio CD players or personal computers. With Drag'n Drop CD+DVD software, you can also back up CDs.

Help and support information for Drag'n Drop CD software program:

web site http://www.ddcd.jp/dd3e/sony/cd

DVgate
Sony Electronics Inc.

Connect a compatible digital video camera to your computer's i.LINK® port and capture video clips and still images. You can edit clips from your video, add new clips, and combine clips into new movie segments. You can also save your images in a variety of popular file formats.

For support information, see Click to DVD (Sony Electronics Inc.).

DVgate Plus
Sony Electronics Inc.

Connect a compatible digital video camera to your computer's i.LINK® port and capture video clips and still images. Edit clips from your video, add new clips, and combine clips into new movie segments. Save your movies back to your digital video camera or in a variety of popular file formats.

For support information, see Click to DVD (Sony Electronics Inc.).

EarthLink TotalAccess® (DSL or Dial-Up)
EarthLink, Inc.

EarthLink, one of the world's largest Internet Service Providers, offers dial-up and broadband access to the Internet. Member benefits include e-mail, newsgroups, an EarthLink Personal Start PageSM, free storage space for your personal Web site, a member magazine, and 24-hour technical support.

Help and support information for EarthLink® software program:

web site http://support.earthlink.net

EverQuest®
Sony Online Entertainment Inc.

This introductory edition of the EverQuest game, a constantly evolving fantasy world, takes users to new heights of online role-playing gaming. Enter an enormous virtual environment — an entire world with its own diverse species, economic systems, alliances, and politics. Make yourself a noble human knight, a vicious dark elf thief, a greedy dwarven merchant, or whatever your heart desires as you meet new friends from around the world and face epic challenges. Rated TEEN by the ESRB. (Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.)

Help and support information for EverQuest® software program:

web site	http://www.everquest.com
telephone	858-537-0898
e-mail	eqtech@soe.sony.com
hours	M - F, 9 AM - 6 PM PST

Giga Pocket® Personal Video Recorder
Sony Electronics Inc.

Giga Pocket® Personal Video Recorder is a unique set of hardware and software components that provide you with excellent TV viewing, recording, and playback experiences. You can watch and record your favorite TV programs from your computer, create custom playlists, and play your Video Capsules on other compatible computers. Giga Pocket® Personal Video Recorder enables your computer, TV, VCR, and other video player devices to work in harmony.

For support information, see Click to DVD (Sony Electronics Inc.).

ImageStation®
Sony Electronics, Inc.

With ImageStation® online service, you can store, organize, and share your photos and video clips online. ImageStation online service membership is free (except for transactions) and includes unlimited storage of digital photos, storage for 15 minutes of video clips, tools to personalize the design and arrangement of your pictures in albums, and access to stories and tips about image handling in ImageStation Magazine.

For support information, see Click to DVD (Sony Electronics Inc.).

Microsoft® Age of Empires® II
Microsoft Corp.

The Age of Empires game is the sequel to the award-winning, best-selling realtime strategy game Age of Empires. The Age of Empires II game spans a thousand years, from the fall of Rome through the Middle Ages in which players lead one of 13 civilizations into greatness. The game keeps the epic scope of the original product's game play while evolving the combat and economic features. Rated TEEN by the ESRB. (Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.)

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Encarta® Online
Microsoft Corp.

The Encarta Online encyclopedia includes more than 47,000 encyclopedia articles, many with multimedia features such as video and audio clips. You'll also find links to trusted Web sites with even more information. An interactive world atlas lets you zoom in on a particular region or country. Content may be suitable for persons ages 6 and older. May contain minimal violence and some comic mischief or crude language.

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Family Game Pack
Microsoft Corp.

Play classic games like chess and checkers with Bicycle Board Games (rated E). Own and run your own zoo in Zoo Tycoon (rated E). Play golf on the finest courses in Links (rated E). Rated E for EVERYONE by the ESRB. (Content may be suitable for persons ages 6 and older. May contain minimal violence and some comic mischief or crude language.)

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Internet Explorer

Microsoft Corp.

Internet Explorer offers dramatic performance, reliability, and usability improvements making it the fastest, easiest and most cost-effective Web browser for people to use, manage and support. Whether you use the Web to read e-mail, news or sports reports, shop online, listen to music or play videos, or share your images and photos with friends family or work colleagues, IE 6 makes it easy, exciting and fun.

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® MSN®
Microsoft Corp.

MSN Internet service combines fast, reliable service with innovative Microsoft software to make the Web more useful for you and your family. The new MSN 8 Internet service includes smart features such as automatic e-mail virus protection services, an intelligent junk mail filter, powerful parental controls, and easy switching tools.

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Money Standard
Microsoft Corp.

Microsoft Money Standard provides a quick and easy way to organize and manage your personal finances. New features include auto-balancing, a bills estimator, spending comparison reports, and investment reminders. Save time organizing and managing your cash flow and balancing your checkbook. Create and track a budget, pay your bills, organize your finances, and view a complete picture of your financial health all in one place.

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Windows® Movie Maker 2
Microsoft Corp.

Windows Movie Maker 2 makes home movies amazingly fun. With Movie Maker 2 you can create, edit and share your home movies right on your PC. Build your movie with a few simple drag-and-drops. Delete bad shots and include only the best scenes. Add special effects, music and narration. Then share your movie via the Web, e-mail, on your PC, CD, or even DVD. You can also save your edited movie back to the DV tape in your camera to play on a TV or even on the camera itself.

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Office XP Professional
Microsoft Corp.

Microsoft Office XP Professional software redefines the relationship between people and software by providing a smarter, simpler way of working. New Office XP Professional software features include context-sensitive smart tags, enhanced formatting options, and more, that enable you to continually integrate additional services into Office and access information anytime. The Office XP Professional suite includes Word, Excel, Outlook®, PowerPoint®, and Access software.

For support information, see Click to DVD (Sony Electronics Inc.).

Microsoft® Office XP Small Business Edition
Microsoft Corp.

Microsoft Office XP Small Business Edition helps you get work done more quickly by providing real-time, context-sensitive options for important actions, from formatting to error correction. Task panes consolidate important tasks into a single integrated view, enabling you to conduct searches, start and format documents, and view the contents of your Clipboard from one location. The Office XP Small Business Edition suite includes Word, Excel, Outlook®, and Publisher software.

For support information, see Click to DVD (Sony Electronics Inc.).

Microsoft® Simulation Game Pack
Microsoft Corp.

Fly your own aircraft in Flight Simulator (rated E). Drive like a maniac in Midtown Madness 2 (rated E). Live in a world of mythology with Age of Mythology (rated T). Rated E for EVERYONE. (Content may be suitable for persons ages 6 and older. May contain minimal violence and some comic mischief or crude language.) Rated T for TEEN. (Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.)

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Windows Media® Player
Microsoft Corp.

Using one of the premiere video and music playback software programs, you can better enjoy listening and watching many

different kinds of media. Other great features include, instant-on playback, Mini-player mode, Intelligent Streaming technology, 5.1-channel surround sound audio codec, and built-in Smart Jukebox features.

For support information, see Microsoft® Works (Microsoft Corp.)

Microsoft® Works
Microsoft Corp.

Works lets you quickly and easily create high-quality, fun documents. Works provides the core tools you need to create documents, manage lists and schedules, create reports and budgets and organize information from many sources. Works includes Word Processor, Works Database, Works Spreadsheet, Works Portfolio, and Works Calendar.

Help and support information for Microsoft® software programs:

web site http://www.support.microsoft.com

MoodLogic
MoodLogic, Inc.

MoodLogic is the world's largest descriptive database of song information. The information is provided from music lovers like you. MoodLogic allows you to browse the songs by artist and genre, narrow your selections by tempo or year, save your favorite playlist and transfer it to a portable player.

Help and support information for MoodLogic software program:

web site http://www.moodlogic.com/support

e-mail help@moodlogic.com

Network Smart Capture
Sony Electronics Inc.

Network Smart Capture captures images and video from any Sony® Digital Camcorder that supports a standard i.LINK® connection. Send your video or still images through e-mail or upload them to the ImageStation® service. You can use the Web camera function to automatically upload your captured images.

For support information, see Click to DVD (Sony Electronics Inc.).

Norton Internet Security
Symantec Corporation

Symantec's Norton Internet Security software provides essential protection from viruses, hackers, and privacy threats. This easy-to-use, integrated suite includes full versions of Norton AntiVirus® and Norton Personal Firewall software to defend your PC against the most common Internet dangers. Norton Internet Security also includes Norton Spam Alert, which helps you detect and filter unwanted e-mail. Norton Parental Control keeps your children safe by letting you block objectionable Web sites and set up separate Internet access privileges for each member of your household. Automatic downloads keep Norton Internet Security software updated against new security threats. This is a trial version of the Norton Internet Security software.

Help and support information for Symantec® software programs:

web site http://www.symantec.com/techsupp

PC-cillin®
Trend Micro, Inc.

PC-cillin antivirus software provides complete, easy-to-use, Internet-era virus protection at your computer's entry points (including beaming, synchronization, and Internet access) to defend against potential threats hidden inside files, e-mail, or on the Web. (Subscription required after initial evaluation period.)

Help and support information for Trend Micro software programs:

web site http://www.trendmicro.com/en/support

telephone 800-864-6027

e-mail pc-cillin@support.trendmicro.com

hours M - F, 5 AM - 5 PM (PST)

PictureGear Studio
Sony Electronics Inc.

PictureGear Studio still image management software displays still images from your hard drive or a Sony digital still camera. The still images appear in a convenient light-table format so that you can easily view the contents of an entire folder, create your own photo albums and make prints.

For support information, see Click to DVD (Sony Electronics Inc.).

Quicken® New User Edition
Intuit Inc.

Quicken software is a fast, easy way to organize your finances. Quicken software works just like your checkbook, so it's easy to learn and use. You can even pay your bills online. Quicken software manages all of your finances, bank accounts, credit cards, investments, and loans. (Users of earlier versions of Quicken software must upgrade for a fee.) Upgrade possible to Quicken® Deluxe, and other versions.

Help and support information for Intuit® software programs:

web site http://www.intuit.com/support

telephone 900-555-4932; 800-644-3193[1]

hours M - F, 5 AM - 5 PM PST

[1] Support from 900-555-4932 is fee-based. Support from 800-644-3193 is automated and free of charge.

QuickTime®
Apple Computer, Inc.

The versatile QuickTime software plays many different kinds of media files, including video, audio, and virtual reality (VR) movies. You can play QuickTime files (referred to as "QuickTime movies") using QuickTime Player or any other application, such as a Web browser or word processor, that supports QuickTime software.

Help and support information for QuickTime® software programs:

web site http://www.info.apple.com

telephone 800-275-2273

RealOne Player
RealNetworks, Inc.

RealOne Player is an all-in-one digital media player that lets you find everything and play anything. RealOne Player fuses a streaming media player, jukebox, browser and new content discovery services all in one application. Play CDs, MP3s and internet radio stations from anywhere in the world. View video clips and movies with the same player. Download music directly to your Sony MiniDisc Walkman® player or your Sony Memory Stick Walkman® player.

Help and support information for RealNetworks ® software programs:

web site(s) http://service.real.com/rjoptions.html

telephone 206-674-2680

RecordNow
Easy Systems LTD, Japan

RecordNow is the ideal CD and DVD disc-mastering software. The RecordNow wizard makes it easy for the novice user to start recording right away.

Help and support information for RecordNow software programs:

web site http://www.easy.co.jp/jrn45/sony

SonicStage
Sony Electronics Inc.

The SonicStage jukebox application gives you all the tools you need to manage music on your computer. SonicStage software sports high-quality digital audio storage, a music visualizer, a sleek player skin design, audio CD burning capability (on computer models that include a CD recording device), and a parametric equalizer for fine-tuning audio playback.

For support information, see Click to DVD (Sony Electronics Inc.).

SonicStage Mastering Studio
Sony Electronics Inc.

Use SonicStage Mastering Studio software to record songs from analog records or cassette tapes into your computer, and output them to CD-R or CD-RW discs, or audio files in WAV format.

For support information, see Click to DVD (Sony Electronics Inc.).

Sony on Yahoo!
Yahoo! Inc.

Personalize your own Web portal with Sony on Yahoo! Get a free Web mail account, customized news and local weather reports, comics, instant messaging, and more.

Help and support information for Yahoo!® Web site programs:

web site http://help.yahoo.com

Screenblast® ACID®
Sony Pictures Digital Entertainment

Use the amazing Screenblast® ACID® software to produce, arrange, and edit your loop-based music. With ACID software, you can slice out long hours from the music-making equation and unlock the doors of your creativity by picking, painting, and playing your songs.

For support information, see Click to DVD (Sony Electronics Inc.).

Screenblast® ACID® Deluxe
Sonic Foundry, Inc. and Sony Pictures Digital Entertainment

Screenblast® ACID® Deluxe software lets you produce, arrange, and edit your loop-based music. With Screenblast ACID Deluxe software you get unlimited tracks, track-at-once burning, higher bit rates, and express effects like reverb.

For support information, see Click to DVD (Sony Electronics Inc.).

Screenblast® Sound Forge®
Sonic Foundry, Inc. and Sony Pictures Digital Entertainment

Sony Screenblast® Sound Forge® software enables you to record, edit, and process mono or stereo audio files for your multimedia or Internet projects. Whether you want to use a number of professional effects, convert video into streaming media, or synchronize audio to video — this software has everything you need to create rich, immersive multimedia and Internet content.

Help and support information for Screenblast® software programs:

web site http://www.sonicfoundry.com/support/default.asp

Sony® VAIO® Product Registration
Sony Electronics Inc.

VAIO Product Registration is an integrated registration application for both Sony Electronics Inc. and Microsoft Corporation.

By registering with Sony, you enable Sony to notify you of software and hardware issues that may affect your user experience. Microsoft directs the data to Sony Electronics Inc. Sony uses the registration data for warranty and product support purposes and the analysis of customer feedback on Sony computer features.

For support information, see Click to DVD (Sony Electronics Inc.).

Sound Blaster® Audigy
Creative Labs, Inc.

Easily create, customize, and listen to MP3/WMA files, set up properties for audio devices, and record sound or music from various sources. Enjoy cinema-quality sound immediately and experience fully enhanced digital or analog sound.

Help and support information for Sound Blaster® software programs:

web site http://www.americas.creative.com/support/custsup.asp

Station.com
Sony Online Entertainment Inc.

Sony Online's award-winning Web site offers gamers the best in casual online games. With popular TV titles such as Jeopardy! Wheel of Fortune Online, card games, and action titles like Cosmic Rift, the station rewards its players with a host of contests and cash giveaways as well as localization so players can play in French, German and Japanese.

For support information, see Click to DVD (Sony Electronics Inc.).

TurboTax® for the Web
Intuit, Inc.

Quickly and easily prepares and files tax returns without downloading or installing any software. From the easy-to-use interview to features such as Instant Data Entry, also found in the TurboTax desktop products, TurboTax for the Web offers easy, fast and customized tax preparation.

For support information, see Quicken New User Edition (Intuit, Inc.).

VAIO Action Setup
Sony Electronics Inc.

VAIO Action Setup manages the settings for your computer's shortcut keys.

For support information, see Click to DVD (Sony Electronics Inc.).

VAIO Edit Components
Sony Electronics Inc.

VAIO Edit Components is a software plug-in for Adobe® Premiere® software that provides maximum compatibility and video quality for capturing video from your Sony digital camcorder.

For support information, see Click to DVD (Sony Electronics Inc.).

VAIO Hints and Tips
Sony Electronics Inc.

VAIO Hints and Tips provides helpful information about using your computer's preinstalled hardware and software. You can find suggestions on improving system performance, answers to frequently asked questions, and creative ways to tap into your computer's multimedia capabilities. As you become familiar with your computer's features, your creative VAIO® computer experience expands.

For support information, see Click to DVD (Sony Electronics Inc.).

VAIO Media
Sony Electronics Inc.

VAIO Media software brings multimedia to your network, enabling you to share music, video, and still image files between your VAIO® computers. You can set up one or more computers as "media servers," which store your multimedia files and make them available to other VAIO computers on your wired or wireless network.

For support information, see Click to DVD (Sony Electronics Inc.).

VAIO Music Services

Sony Electronics Inc.

Download music from the web, create your own albums, or have CDs sent straight to your house with VAIO Music Services. The ultimate place on the Web for music lovers to find out information about their favorite artist and get all of the latest music news.

For support information, see Click to DVD (Sony Electronics Inc.).

VAIO Support Agent

Sony Electronics Inc.

VAIO Support Agent provides immediate, interactive online support with information about your preinstalled software and answers to frequently asked questions.

For support information, see Click to DVD (Sony Electronics Inc.).

WinDVD® for VAIO®

InterVideo, Inc.

WinDVD software serves as a simple-to-use DVD player that offers all the features you would expect to find in a standard consumer DVD player, including advanced display and navigation features such as zoom, pan, bookmark, and time search.

Help and support information for WinDVD® software program:

web site	http://www.intervideo.com/jsp/Support.jsp
telephone	510-651-0888

Resources for Additional Help and Support

If the information provided with your VAIO® computer does not offer an immediate solution, or you would like to get direct support, try these additional help and support resources.

Sony Online Support Web site

Online help and support are available 24 hours a day, seven days a week, when you visit the Sony Online Support Web site. You can access the Web site at http://www.sony.com/pcsupport.

The Sony Online Support Web site provides:

- Information about your specific model computer, such as
  - hardware and software specifications.
  - upgrade and maintenance procedures.
  - safety and legal information.
  - quick solutions to common problems.
- An automated tutorial library that contains interactive, easy-to-understand lessons on using your computer's hardware and software features.
- Links that enable you to:
  - quickly find the nearest Sony service center locations.
  - arrange for repairs or check repair status.
  - review warranty information.
  - e-mail your question or comments to the Sony Customer Information Services Center.
  - check pricing and availability for products, accessories and parts, as well as purchase online.
  - access the Sony Solutions Knowledge Base, a database that contains answers to many frequently asked questions.

Sony Customer Information Services Center

If other support options do not resolve your issue, you can contact a Sony Support representative directly.

Before making a call to the Sony Customer Information Services Center, have this basic information readily available.

1. VAIO® computer system type.
2. Model number.
3. Serial number[1].

   Example:

4. Operating system.
5. Hardware feature or software application that has a problem. (See Software Help and Support for the appropriate software contact information.)
6. Brief description of the issue.

For VAIO® computers purchased in the U.S. and Canada, contact a Sony Support representative at 1-888-476-6972.

[1] The serial number is located on the back panel of your computer. The serial number is on a white barcode label.